DOCUMENT RESUME

ED 435 583 SO 031 348

AUTHOR	Lutkus, Anthony D.; Weiss, Andrew R.; Campbell, Jay R.; Mazzeo, John; Lazer, Stephen
TITLE	NAEP 1998 Civics Report Card for the Nation.
INSTITUTION	National Center for Education Statistics (ED), Washington, DC.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO	NCES-2000-457
PUB DATE	1999-11-00
NOTE	196p.; "In collaboration with Edward Kulick, Spencer Swinton, Venus Leung." For highlights of the 1998 Civics Report Card, see SO 031 349.
AVAILABLE FROM	U.S. Department of Education (ED Pubs), P.O. Box 1398, Jessup, MD 20794-1398. Tel: 877-433-7827 (Toll Free). For full text: <http://nces.ed.gov/nationsreportcard/>.
PUB TYPE	Numerical/Quantitative Data (110) -- Reports - Research (143)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	*Academic Achievement; Academic Standards; *Civics; Curriculum Based Assessment; Elementary Secondary Education; Evaluation Methods; Grade 12; Grade 4; Grade 8; Knowledge Level; *National Competency Tests; Program Evaluation; *Standardized Tests; *Student Evaluation; Tables (Data)
IDENTIFIERS	*National Assessment of Educational Progress (NAEP)

ABSTRACT

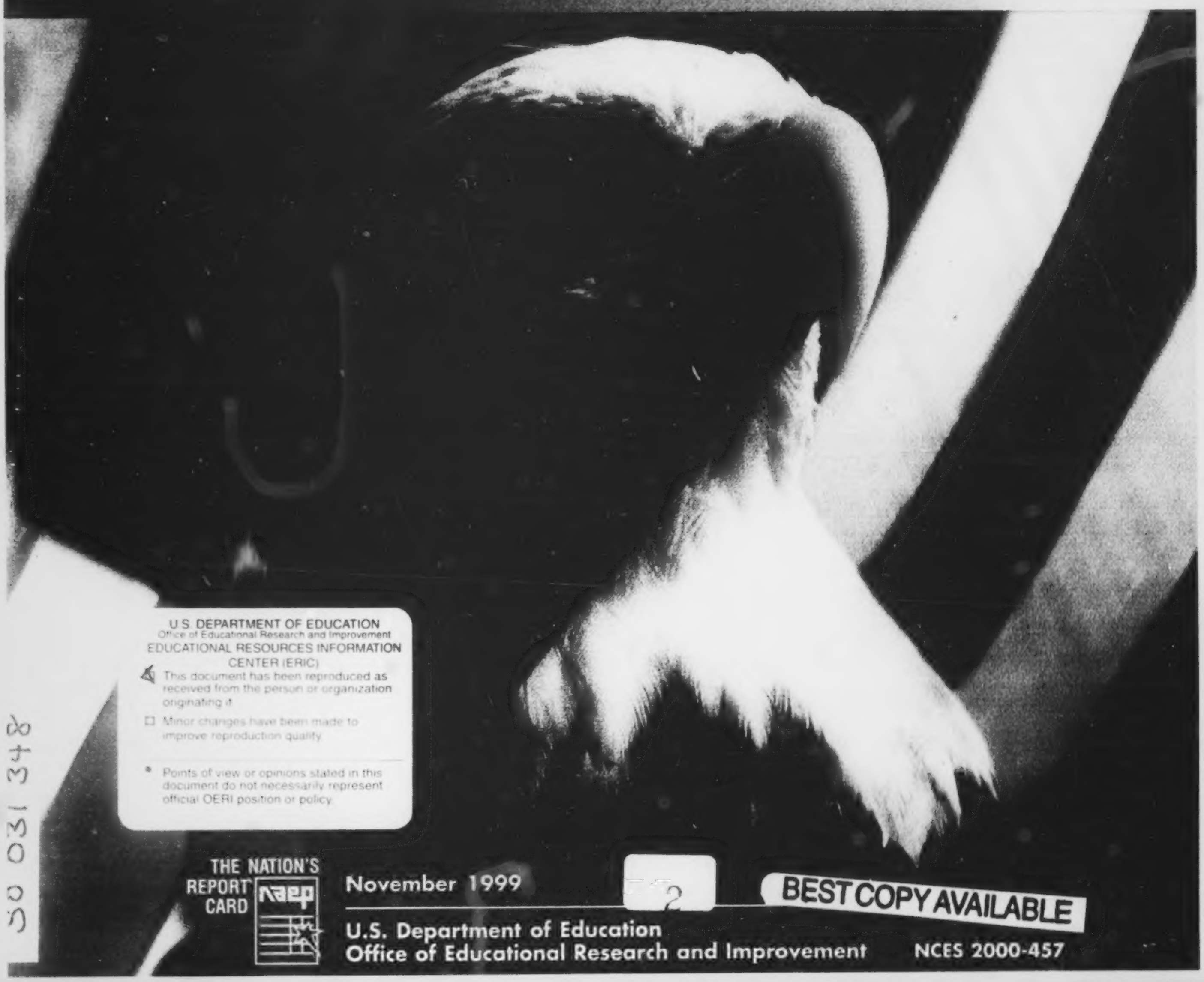
The National Assessment of Educational Progress (NAEP) is the nation's only ongoing survey of what students know and can do in various academic subject areas. This report summarizes the results of the 1998 NAEP civics assessment for the nation. The results are based on an assessment of students at grade 4, grade 8, and grade 12. Students' performance is described in terms of their average civics score on a 0 to 300 scale and in terms of the percentage of students attaining each of three achievement levels: (1) basic; (2) proficient; and (3) advanced. The achievement levels are performance standards adopted by the National Assessment Governing Board (NAGB) as part of its statutory responsibilities. In addition to providing average scores and achievement level performance for the nation, this report also provides results for subgroups of students defined by various background and contextual characteristics. Further, the report explores relationships between selected teacher and classroom activities and student performance. The chapter titles include: (1) "Average Scale Score and Achievement Level Results for the Nation"; (2) "Average Civics Scale Score Results for Selected Subgroups"; (3) "Civics Achievement Level Results for Selected Subgroups"; (4) "Contexts for Learning Civics: School/Teacher Policies and Practices"; and (5) "Contexts for Learning Civics: Classroom Practices and Student Variables." The appendices include an overview of procedures used in the assessment, standard errors, and a list of the members of the NAEP civics development and standing committees. (LB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

NATIONAL CENTER FOR EDUCATION STATISTICS

ED 435 583

NAEP 1998
CIVICS
REPORT CARD FOR THE NATION



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

SO 031 348

THE NATION'S REPORT CARD naep

November 1999

BEST COPY AVAILABLE

U.S. Department of Education
Office of Educational Research and Improvement

NCES 2000-457

What is The Nation's Report Card?

THE NATION'S REPORT CARD, the National Assessment of Educational Progress (NAEP), is the only nationally representative and continuing assessment of what America's students know and can do in various subject areas. Since 1969, assessments have been conducted periodically in reading, mathematics, science, writing, history, geography, and other fields. By making objective information on student performance available to policymakers at the national, state, and local levels, NAEP is an integral part of our nation's evaluation of the condition and progress of education. Only information related to academic achievement is collected under this program. NAEP guarantees the privacy of individual students and their families.

NAEP is a congressionally mandated project of the National Center for Education Statistics, the U.S. Department of Education. The Commissioner of Education Statistics is responsible, by law, for carrying out the NAEP project through competitive awards to qualified organizations. NAEP reports directly to the Commissioner, who is also responsible for providing continuing reviews, including validation studies and solicitation of public comment, on NAEP's conduct and usefulness.

In 1988, Congress established the National Assessment Governing Board (NAGB) to formulate policy guidelines for NAEP. The Board is responsible for selecting the subject areas to be assessed from among those included in the National Education Goals; for setting appropriate student performance levels; for developing assessment objectives and test specifications through a national consensus approach; for designing the assessment methodology; for developing guidelines for reporting and disseminating NAEP results; for developing standards and procedures for interstate, regional, and national comparisons; for determining the appropriateness of test items and ensuring they are free from bias; and for taking actions to improve the form and use of the National Assessment.

The National Assessment Governing Board

Mark D. Musick, Chair
President
Southern Regional Education Board
Atlanta, Georgia

Michael T. Nettles, Vice Chair
Professor of Education & Public Policy
University of Michigan
Ann Arbor, Michigan

Moses Barnes
Secondary School Principal
Fort Lauderdale, Florida

Melanie A. Campbell
Fourth-Grade Teacher
Topeka, Kansas

Honorable Wilmer S. Cody
Commissioner of Education
State of Kentucky
Frankfort, Kentucky

Daniel A. Domenech
Superintendent of Schools
Fairfax County Public Schools
Fairfax, Virginia

Edward Donley
Former Chairman
Air Products & Chemicals, Inc.
Allentown, Pennsylvania

Honorable John M. Engler
Governor of Michigan
Lansing, Michigan

Thomas H. Fisher
Director, Student Assessment Services
Florida Department of Education
Tallahassee, Florida

Michael J. Guerra
Executive Director
Secondary Schools Department
National Catholic Education Association
Washington, DC

Edward H. Haertel
Professor, School of Education
Stanford University
Stanford, California

Juanita Haugen
Local School Board President
Pleasanton, California

Honorable Nancy Kopp
Maryland House of Delegates
Bethesda, Maryland

Mitsugi Nakashima
President
Hawaii State Board of Education
Honolulu, Hawaii

Debra Paulson
Eighth-Grade Mathematics Teacher
El Paso, Texas

Honorable Jo Ann Pottorff
Kansas House of Representatives
Wichita, Kansas

Diane Ravitch
Senior Research Scholar
New York University
New York, New York

Honorable Roy Romer
Former Governor of Colorado
Denver, Colorado

John H. Stevens
Executive Director
Texas Business and Education Coalition
Austin, Texas

Adam Urbanski
President
Rochester Teachers Association
Rochester, New York

Deborah Voltz
Assistant Professor
Department of Special Education
University of Louisville
Louisville, Kentucky

Marilyn A. Whirry
Twelfth-Grade English Teacher
Manhattan Beach, California

Honorable Michael Ward
Superintendent of Public Instruction
State of North Carolina
Raleigh, North Carolina

Dennie Palmer Wolf
Senior Research Associate
Harvard Graduate School of Education
Cambridge, Massachusetts

C. Kent McGuire (Ex-Officio)
Assistant Secretary of Education
Office of Educational Research
and Improvement
U.S. Department of Education
Washington, DC

Roy Truby
Executive Director, NAGB
Washington, DC

NATIONAL CENTER FOR EDUCATION STATISTICS

NAEP 1998
CIVICS
REPORT CARD FOR THE NATION

Anthony D. Lutkus
Andrew R. Weiss
Jay R. Campbell
John Mazzeo
Stephen Lazer

In collaboration with

Edward Kulick
Spencer Swinton
Venus Leung

November 1999

U.S. Department of Education
Office of Educational Research and Improvement

NCES 2000–457

U.S. Department of Education
Richard W. Riley
Secretary

Office of Educational Research and Improvement
C. Kent McGuire
Assistant Secretary

National Center for Education Statistics
Gary W. Phillips
Acting Commissioner

Assessment Division
Peggy G. Carr
Associate Commissioner

November 1999

SUGGESTED CITATION
U.S. Department of Education. Office of Educational Research and Improvement. National Center for Education Statistics. *The NAEP 1998 Civics Report Card for the Nation*, NCES 2000–457, by A.D. Lutkus, A.R. Weiss, J.R. Campbell, J. Mazzeo, & S. Lazer. Washington, DC: 1999.

FOR MORE INFORMATION
Content contact:
Arnold A. Goldstein
202–219–1741

To obtain single copies of this report, while supplies last, or ordering information on other U.S. Department of Education products, call toll free 1–877– 4ED PUBS (877–433–7827), or write:

Education Publications Center (ED Pubs)
U.S. Department of Education
P.O. Box 1398
Jessup, MD 20794–1398

TTY/TDD 1–877–576–7734
FAX 301–470–1244

Online ordering via the Internet: ***http://www.ed.gov/pubs/edpubs.html***
Copies also are available in alternate formats upon request.
This report also is available on the World Wide Web: ***http://nces.ed.gov/nationsreportcard/***

Due to the confidential nature of NAEP surveys, the photographs throughout this report do not portray actual students who participated in the NAEP civics assessment. All photographs used are from Comstock, EyeWire Images, The Stock Market and PhotoDisc stock libraries.

The work upon which this publication is based was performed for the National Center for Education Statistics, Office of Educational Research and Improvement, by Educational Testing Service.

TABLE OF CONTENTS

EXECUTIVE SUMMARY ix

INTRODUCTION 1

Overview of the 1998 National Assessment of Educational Progress (NAEP) 1
Framework for the 1998 Assessment 2
The Civics Assessment Instruments 6
Description of School and Student Samples 8
Scoring the 1998 Civics Assessment 9
Reporting the Civics Assessment Results 9
The Setting of Achievement Levels 10
The Developmental Status of Achievement Levels 12
Interpreting NAEP Results 15
Cautions in Interpretation 15

CHAPTER 1. Average Scale Score and Achievement Level Results for the Nation 17

Overview 17
Average Scale Score Results for the Nation 17
Achievement Level Results for the Nation 18
Sample Questions and Student Responses 24
  Grade 4 *Basic* Level – Sample Question and Response 25
  Grade 4 *Proficient* Level – Sample Question 26
  Grade 4 *Advanced* Level – Sample Question 27
  Grade 8 *Basic* Level – Sample Question 28
  Grade 8 *Proficient* Level – Sample Question 29
  Grade 8 *Advanced* Level – Sample Question and Response 30
  Grade 12 *Basic* Level – Sample Question 31
  Grade 12 *Proficient* Level – Sample Question and Response 32
  Grade 12 *Advanced* Level – Sample Question 33

CHAPTER 2. Average Civics Scale Score Results for Selected Subgroups 35

Overview 35
Gender 36
Race/Ethnicity 37
Parents' Highest Level of Education 39
Region of the Country 41
Type of Location 42
Eligibility for the Free/Reduced-Price School Lunch Program 43
Type of School 44
Summary 46

CHAPTER 3. Civics Achievement Level Results for Selected Subgroups . . . 47

- Overview . . . 47
- Gender . . . 47
- Race/Ethnicity . . . 50
- Parents' Highest Level of Education . . . 53
- Region of the Country . . . 56
- Type of Location . . . 59
- Eligibility for the Free/Reduced-Price School Lunch Program . . . 61
- Type of School . . . 63
- Summary . . . 65

CHAPTER 4. Contexts for Learning Civics: School/Teacher Policies and Practices . . . 67

- Overview . . . 67
- Who Teaches Civics? . . . 67
- How Well Prepared are Teachers? . . . 74
- How Much Class Time is Given to Civics? . . . 78
- Do Teachers Believe They Have Adequate Resources? . . . 79
- What is the Pattern of Technology Usage to Enhance Instruction? . . . 80
- Summary . . . 84

CHAPTER 5. Contexts for Learning Civics: Classroom Practices and Student Variables . . . 87

- Overview . . . 87
- What Civics Topics do Students Study? . . . 88
- What Instructional Techniques do Civics Teachers Use? . . . 91
- What are the Differences in Instructional Patterns Between Experienced and Less Experienced Teachers? . . . 95
- Out-of-School Contexts . . . 98
- Summary . . . 104

APPENDIX A. Overview of Procedures Used in the NAEP 1998 Civics Assessment . . . 107

APPENDIX B. Standard Errors . . . 133

APPENDIX C. Members of the NAEP Civics Development and Standing Committees . . . 175

ACKNOWLEDGMENTS

TABLES AND FIGURES

Table i.1 Percentage of civics assessment time by item format, grades 4, 8, and 12: 1998 . . . 6

Table i.2 Percentage distribution of civics assessment time by content area, grades 4, 8, and 12: 1998 . . . 7

Table i.3 Percentage distribution of civics assessment time by intellectual skills, grades 4, 8, and 12: 1998 . . . 7

Figure i.1 Achievement level policy definitions . . . 11

Table 1.1 Civics scale scores by percentiles: 1998 . . . 18

Figure 1.1 Civics achievement levels, grade 4: 1998 . . . 19

Figure 1.2 Civics achievement levels, grade 8: 1998 . . . 20

Figure 1.3 Civics achievement levels, grade 12: 1998 . . . 21

Table 1.2 Percentage of students at or above the civics achievement levels for the nation: 1998 . . . 22

Figure 1.4 Percentage of students within each civics achievement level range for the nation: 1998 . . . 23

Table 1.3 Percentage "Acceptable" or better within achievement level ranges, grade 4: *Functions and purpose of government* . . . 25

Table 1.4 Percentage "Correct" within achievement level ranges, grade 4: *Relationship of the U.S. to other nations and to world affairs* . . . 26

Table 1.5 Percentage "Correct" within achievement level ranges, grade 4: *Roles of U.S. citizens in American democracy* . . . 27

Table 1.6 Percentage "Correct" within achievement level ranges, grade 8: *Relationship of the U.S. to other nations and to world affairs* . . . 28

Table 1.7 Percentage "Correct" within achievement level ranges, grade 8: *Foundations of the American political system* . . . 29

Table 1.8 Percentage "Complete" within achievement level ranges, grade 8: *Foundations of the American political system* . . . 30

Table 1.9 Percentage "Correct" within achievement level ranges, grade 12: *Foundations of the American political system* . . . 31

Table 1.10 Percentage "Complete" within achievement level ranges, grade 12: *Foundations of the American political system* . . . 32

Table 1.11 Percentage "Correct" within achievement level ranges, grade 12: *Functions and purpose of government* . . . 33

Table 2.1 Average civics scale scores by gender: 1998 . . . 36

Table 2.2 Average civics scale scores by race/ethnicity: 1998 . . . 38

Table 2.3 Average civics scale scores by parents' highest level of education: 1998 . . . 40

Table 2.4 Average civics scale scores by region: 1998 . . . 41

Table 2.5 Average civics scale scores by type of location: 1998 . . . 42

Table 2.6 Average civics scale scores by Free/Reduced-Price School Lunch Program eligibility: 1998 . . . 43

Table 2.7 Average civics scale scores by type of school: 1998 . . . 45

Table 3.1 Percentage of students at or above achievement levels in civics by gender: 1998 48

Figure 3.1 Percentage of students within each achievement level range in civics by gender: 1998 49

Table 3.2 Percentage of students at or above achievement levels in civics by race/ethnicity: 1998 51

Figure 3.2 Percentage of students within each achievement level range in civics by race/ethnicity: 1998 52

Table 3.3 Percentage of students at or above achievement levels in civics by parents' highest level of education: 1998 54

Figure 3.3 Percentage of students within each achievement level range in civics by parents' highest level of education: 1998 55

Table 3.4 Percentage of students at or above achievement levels in civics by region: 1998 57

Figure 3.4 Percentage of students within each achievement level range in civics by region: 1998 58

Table 3.5 Percentage of students at or above achievement levels in civics by type of location: 1998 59

Figure 3.5 Percentage of students within each achievement level range in civics by type of location: 1998 60

Table 3.6 Percentage of students at or above achievement levels in civics by Free/Reduced-Price School Lunch Program eligibility: 1998 61

Figure 3.6 Percentage of students within each achievement level range in civics by Free/Reduced-Price School Lunch Program eligibility: 1998 62

Table 3.7 Percentage of students at or above achievement levels in civics by type of school: 1998 63

Figure 3.7 Percentage of students within each achievement level range in civics by type of school: 1998 64

Table 4.1 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by teacher's highest degree, grades 4 and 8: 1998 . . 68

Table 4.2 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by teacher's undergraduate major, grades 4 and 8: 1998 . 69

Table 4.3 Percentage of students, average civics scale scores and percentage at or above *Proficient* by teacher's type of certification, grades 4 and 8: 1998 . . . 70

Table 4.4 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by years of general teaching experience, grades 4 and 8: 1998 71

Table 4.5 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by years teaching government/civics, grades 4 and 8: 1998 72

Table 4.6 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by amount of time teachers reported spending in professional development workshops in social studies during the last twelve months, grades 4 and 8: 1998 73

Table 4.7 Percentage of students, average civics scale scores, and percentage at or above *Proficient*, by teacher's reported preparation, grades 4 and 8: 1998 75

Table 4.8 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by teacher's reported preparedness to fulfill certain teaching-related tasks, grades 4 and 8: 1998 77

Table 4.9 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by class time per day spent on social studies instruction, grades 4 and 8: 1998 78

Table 4.10 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by teacher's reports on the availability of resources, grades 4 and 8: 1998 79

Table 4.11 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by availability of computers, grades 4, 8, and 12: 1998 . . 81

Table 4.12 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by use of computers and the Internet for social studies instruction, as reported by teachers, grades 4 and 8: 1998 83

Table 5.1 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by type of content studied this year as reported by students, grade 4: 1998 89

Table 5.2 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by type of content studied this year as reported by students, grades 8 and 12: 1998 90

Table 5.3 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by frequency of selected instructional activities as reported by teachers, grade 4: 1998 92

Table 5.4 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by frequency of selected instructional activities as reported by teachers, grade 8: 1998 93

Table 5.5 Summary of paired percentages of students and paired scale score means with significant differences between less experienced (two years or less) and experienced (three years or more) teachers by selected types of instructional activities, grade 4: 1998 96

Table 5.6 Summary of examples of pairs of percentages of students with significant differences between social studies teachers who participated in social studies workshops in the past year and those who did not, by type of instructional activity, grades 4 and 8: 1998 99

Table 5.7 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by frequency of discussion of school studies at home, grades 4, 8, and 12: 1998 100

Table 5.8 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by volunteer work status, grade 12: 1998 101

Table 5.9 Percentage of students, average civics scale scores, and percentage at or above *Proficient* by hours per week working at a job for pay, grade 12: 1998 102

Figure 5.1 Average civics scale scores by hours worked at a job for pay, grade 12: 1998 103

EXECUTIVE SUMMARY

The National Assessment of Educational Progress (NAEP) is the nation's only ongoing survey of what students know and can do in various academic subject areas. Authorized by Congress and administered by the National Center for Education Statistics in the U.S. Department of Education, NAEP regularly reports to the public on the educational progress of students in grades 4, 8, and 12. In 1998 NAEP conducted a national assessment of civics knowledge of students in each of these grades.

This report presents the results of the NAEP 1998 civics assessment for the nation. The results are based on assessing a sample of students at each grade that is statistically representative of the entire nation. In total, 5,948 fourth graders, 8,212 eighth graders, and 7,763 twelfth graders were assessed. For this subject assessment, in contrast to the other major subject reports presented this year in reading and writing, there were no additional state-level results. Students' performance on the national assessment is described in terms of their average civics score on a 0 to 300 scale and in terms of the percentage of students attaining each of three achievement levels: *Basic, Proficient*, and *Advanced*.

The achievement levels are performance standards adopted by the National Assessment Governing Board (NAGB) as part of its statutory responsibilities. The achievement levels are collective judgments by broadly representative panels of classroom teachers, education specialists, and members of the general public.

As provided by law, the Acting Commissioner of Education Statistics, upon review of a congressionally mandated evaluation of NAEP, has determined that the achievement levels are to be considered developmental. However, both the Acting Commissioner and NAGB believe these performance standards are useful for understanding student achievement. They have been widely used by national and state officials, including the National Education Goals Panel, as a common yardstick of academic performance.

In addition to providing average scores and achievement level performance for the nation, this report also provides results for subgroups of students defined by various background and contextual characteristics. Further, the report explores relationships between selected teacher and classroom activities and student performance. A summary of the major findings from the NAEP 1998 civics assessment is presented on the following pages.

BEST COPY AVAILABLE

Civics Scale Score and Achievement Level Results

Overall results

- Average scale scores for the nation were set at 150 on a scale of 0 to 300 for all grades assessed (4, 8, and 12). This average can be used as a common reference point within grades and for comparisons among population subgroups.
- At grades 4, 8, and 12, the percentages of students performing at or above the *Basic* level of civics achievement were 69, 70, and 65 percent respectively; the percentages performing at or above the *Proficient* level were 23, 22, and 26 percent respectively. Two percent of the students at grades 4 and 8, and 4 percent at grade 12 performed at the highest achievement level, *Advanced*.

Results for student subgroups

Gender

- Female students had higher average scale scores than male students at grades 8 and 12, but not at grade 4. At grades 8 and 12, the percentages of students at or above the *Basic* level were higher among females than among males. At grade 12, however, the percentage of students at the *Advanced* level was higher among males than females.

Race/Ethnicity

- At grade 4, White students had higher average scale scores than their Asian/Pacific Islander peers, who in turn had higher average scale scores than their Black, Hispanic, and American Indian counterparts. At this grade, Hispanic students scored at lower average levels than members of other ethnic groups. At grades 8 and 12, White students had higher average scale scores than Black, Hispanic, and American Indian students. At grade 8, Black and Asian/Pacific Islander students scored at higher levels than their Hispanic counterparts. At grade 12, Asian/Pacific Islander students performed at a higher level than their Black, Hispanic, and American Indian peers.
- At all three grades, the percentages of White students at or above the *Proficient* achievement level were higher than those of Black students, Hispanic students, and American Indian students. A higher percentage of White students than Black or Hispanic students reached the *Advanced* level at grade 12. At grade 8, a higher percentage of Asian/Pacific Islander students than Black, Hispanic, or American Indian students were at or

above the *Proficient* level. A higher percentage of Asian/Pacific Islander students also reached the *Proficient* level at grade 4 than did their Black and Hispanic counterparts.

Parents' level of education

- Consistent with findings of past NAEP assessments, higher levels of parental education were associated with higher levels of student performance, especially at the upper grades. For example, as high school seniors reported higher levels of parental education, their average scores increased.

- A larger percentage of grade 4 students who reported that their parents graduated from college than students who indicated their parents did not graduate from high school were at or above the *Proficient* achievement level. At grade 8, higher percentages of students whose parents were reported to have graduated from college were at the *Advanced* level, or at or above the *Proficient* level, than were students from the other parental education groups. The percentage of grade 8 students at the *Basic* level was highest among students whose parents graduated from college and lowest among students whose parents did not graduate from high school. At grade 12, groups with higher parental education levels had higher percentages of students at or above each of the achievement levels.

Region of the country

- Students in the Northeast and Central regions had higher average scale scores than those in the Southeast and West at grades 4 and 8. In addition, at grade 4, students in the Southeast outperformed those in the West. At grade 12, students in the Central region outperformed their peers elsewhere, while seniors in the Northeast had higher average scores than those in the Southeast.

- At grade 4, the percentage of students at the *Advanced* level was higher in the Central region than in the West. At all three grades, higher percentages of students in the Northeast and Central regions were at or above the *Proficient* level than in the Southeast. At grades 4 and 8, the Northeast and Central regions had higher percentages of students at or above *Basic* than did the Southeast and the West. At grade 12, the percentage of students at or above *Basic* was higher in the Central region than in the Southeast and West.

Type of location

- At grades 4 and 8, students from schools in urban fringe/large town and rural/small town locations had higher average scale scores than their peers in central city schools. At grade 8, students from schools in urban fringe/large town locations outperformed their peers from schools in rural/small town locations.
- At grade 8, the percentages of students at or above the *Basic* and *Proficient* levels were higher among students from urban fringe/large town locations than among students from central city or rural/small town locations. At grade 4, the percentage of students at or above the *Proficient* level was higher among urban fringe/large town locations than among the other two groups. Both urban fringe/large town and rural/small town locations had higher percentages of students at the *Basic* level than did central city locations.

Free/Reduced-Price School Lunch Program

- At all three grades, students who were eligible for the federally funded Free/Reduced-Price School Lunch Program had lower average civics scale scores than students who were not eligible.

Type of school

- At all three grade levels, students attending nonpublic schools had higher average scale scores than their counterparts attending public schools. The percentages at or above each of the achievement levels were also higher among students attending nonpublic schools than among students attending public schools.

Contexts for learning civics: Teacher characteristics

- The majority of students at both grades 4 and 8 were taught civics by teachers at the Bachelor's degree level (teachers in the twelfth grade did not receive a questionnaire). Forty-three percent of fourth graders and 46 percent of eighth graders were taught by teachers who had Master's or higher degrees. The fourth-grade students taught by Master's-level teachers had higher scores than fourth-grade students taught by teachers with Bachelor's degrees.
- For both fourth- and eighth-grade student samples, the teacher's undergraduate major in college was not related to student performance on the civics assessment.

- Fourth-grade students whose teachers had either advanced professional or regular teaching certification produced higher civics scores than students whose teachers had certification in the "temporary/provisional" category.

- Students at both fourth and eighth grades generally had social studies teachers with three or more years' experience. Only 11 percent of students at grade 4 and 10 percent at grade 8 had teachers with two years or less of experience. In the fourth grade only, students with teachers from the least-experienced category were outscored in the civics assessment by students whose social studies teachers had three or more years of experience.

- Students at both fourth and eighth grades had teachers who rated themselves as well prepared in social studies instruction, classroom climate/governance, classroom management, and the use of computers. However, teachers in both grades generally rated themselves as much less well prepared in using the voluntary national standards for civics/government or in using computer software for social studies instruction.

- Over half of the teachers in both grades felt that they received "most" of the resources they need, while only one percent felt that they received "none" of the resources they need.

- Across all three grades, 36 to 41 percent of students were in schools answering "yes" to whether computers were available to bring to classrooms when needed. In both grades 8 and 12, students whose schools answered "yes" to this question outscored students whose schools answered "no."

- However, 67 percent of fourth graders and 63 percent of eighth graders were in classes where the teacher indicated "never or hardly ever" using computer software in class. In one fourth-grade category, students whose teachers indicated using computer software once or twice a month, had higher average scale scores than students in the "never or hardly ever" category.

- Almost three-quarters (73 percent) of fourth graders were in classes where teachers indicated never or hardly ever using the Internet for social studies. Internet usage appeared more common in the eighth grade, where only 55 percent of students were in classes that never or hardly ever used it, while 35 percent used it once or twice a month. In both the fourth and eighth grades, students using the Internet once or twice a month achieved higher average scale scores than students who never used the Internet.

Contexts for learning civics: Classroom and student variables

- Over 70 percent of students at both grades 4 and 8 indicated that they had studied the U.S. Constitution and Congress in the current school year.
- Generally, less than half the fourth- and eighth-grade students indicated that they had studied other countries' governments or international organizations such as the United Nations (UN).
- For both grades 4 and 8, the highest percentages of students were taught on a weekly basis with "traditional" instructional activities: using the social studies textbook; using quantitative data, charts or graphs; completing worksheets; hearing a teacher's lecture; and using books, newspapers or magazines.
- Instructional activities that were used on a weekly basis with low percentages of students included: use of computer software; writing a report of three or more pages; participating in debates or mock trials; and, writing letters on civic topics.
- Only 35 percent of students in the fourth grade and 43 percent in the eighth grade received group activities or projects on at least a weekly basis. However, in both grades, small-group activities were employed more commonly (53 percent in fourth grade and 52 percent in eighth grade) on a once-or-twice-a-month basis — and the assessment results in grade 8 indicated that students in this frequency category outscored students who "never or hardly ever" participated in small-group activities.
- Teachers indicated how frequently they employed each of a wide range of classroom instructional activities with their social studies students. For all instructional activity categories at grade 4, the groups of students taught by teachers with three or more years of experience had higher civics scores than students taught by teachers with two years or less experience. This pattern of advantage for students of experienced teachers over students of less-experienced teachers by instructional activity did not appear, however, in grade 8.

- Among fourth graders, 58 percent of students were taught by teachers who had attended professional development activities in the past year. At grade 8, the comparable figure was 65 percent. At grade 4, students of teachers who attended workshops were taught less frequently using worksheets and more often using group activities and the "active" instructional techniques of debates, mock trials, and letter writing. Similarly, teachers at grade 8 who attended workshops were less likely to use textbooks and more likely to use extended reports, debates, and mock trials.
- At every grade there is a positive association between frequency of discussion of schoolwork at home and average civics scale scores. At least two-thirds of students across the three grades reported discussing schoolwork at home at least once a week.
- More than half of grade 12 students indicated they did some volunteer work in their communities. Those who volunteered had higher civics scores than those who never volunteered.
- Almost two-thirds of the twelfth-grade students indicated at least some hours worked each week at a job for pay. About a fifth (21 percent) of the students reported working 21 or more hours per week. Students who worked between 6 and 15 hours per week had the highest scores on the assessment.

INTRODUCTION

The health of American constitutional democracy depends on the informed and active participation of the nation's citizens in civic affairs. Yet, will the next generation of citizens have the skills and interest to fulfill its responsibility? Recent research into the civic attitudes of college students and adults reveals little interest in politics or activism and poor knowledge of even such basic subjects as the United States Constitution. Although these findings do not augur well for the future, it is instructive that Americans still believe that education for citizenship is one of the primary goals of education.[1]

In most school districts around the country, students never take a course called civics; courses by that name were gradually phased out over much of the twentieth century. Today, civics concepts are primarily taught as part of social studies, history, and government classes. But, it is with the understanding that civics education — beginning early in a child's educational career and continuing through high school — is critical to the survival of democratic government in this country that NAEP offers a unique assessment in civics at grades 4, 8, and 12. The results from the 1998 NAEP civics assessment presented in this Report Card can help answer the question: "Are the schools fulfilling their role as educators of good citizens?"

Overview of the 1998 National Assessment of Educational Progress (NAEP)

This report is written for a variety of audiences — policymakers, parents, teachers, and concerned citizens. The results reported here can provide important information for them to consider in discussing and making decisions about how best to prepare the nation's students to become concerned and active citizens.

---

[1] The results of recent research are summarized by Branson, M.S. (1998) in *The role of civic education.* [On-line]. Available: http://www.civiced.org/articles_role.html.

Branson, M.S. (1994). ***What does research on political attitudes and behavior tell us about the need for improving education for democracy?*** Paper presented at the International Conference on Education for Democracy, Malibu, CA.

BEST COPY AVAILABLE

The NAEP is the only nationally representative and continuing assessment of what students in the United States know and can do in various subjects. NAEP is authorized by Congress and directed by the National Center for Education Statistics (NCES) of the U.S. Department of Education. The National Assessment Governing Board (NAGB), an independent body, provides policy direction for NAEP.

Since it was authorized by Congress in 1969, NAEP's mission has been to collect, analyze, and present reliable and valuable information about what students know and can do. Both public and private school students in grades 4, 8, and 12 are sampled and assessed on a regular basis in core academic subject areas.

All NAEP assessments are based on a content framework developed through a national consensus process that involves teachers, curriculum experts, parents, and members of the general public. The *NAEP Civics Framework*[2] was newly written for the 1998 assessment, as were all of the assessment questions. Therefore, it is not possible to compare results of student achievement in civics from the 1998 assessment with those of earlier assessments. However, a separate trend study was conducted in 1998 using questions from the previous NAEP civics assessment conducted in 1988. Results from the trend study will appear in a separate report.

The 1998 civics assessment was administered to national samples of fourth, eighth, and twelfth graders. At fourth grade 5,948 students were assessed; at eighth grade, 8,212; and at twelfth grade, 7,763.

This report describes the results of the NAEP 1998 civics assessment. The assessment consisted of a combination of multiple-choice and constructed-response (open-ended) questions. Each student participating in the assessment received two 25-minute sections of questions. There were 15 questions in each section at grade 4, 19 questions in each section at grade 8, (with the exception of one section with 18 questions); and 19 questions in each section at grade 12.

Framework for the 1998 Assessment

The *NAEP Civics Framework* established the objectives for the 1998 civics assessment and provided the specifications that guided development of the assessment instrument. The framework was developed for the National Assessment Governing Board (NAGB) through a national consensus process conducted by the Council of Chief State School Officers in conjunction with the Center for Civic Education and the American Institutes for Research. It benefited from the input of many and diverse perspectives. The steering committee that oversaw the framework development was comprised of representatives from education and policy organizations, business, and government. The planning committee that wrote the framework was made up of teachers and teacher educators, scholars, curriculum experts, and assessment specialists. In addition, input was solicited and received from educators, scholars, students, and the general public.

---

[2] National Assessment Governing Board. (1996). *Civics framework for the 1998 National Assessment of Educational Progress.* Washington, DC: Author.

Development of the framework rested on two important ideas. First, the preservation of American constitutional democracy depends upon a well-educated citizenry participating actively in public affairs. To be well educated means not only to have knowledge about government and society, but also to possess the skills and civic dispositions necessary for effective participation. Second, although families, religious institutions, and other influences have an important role in shaping individuals' civic character, the schools "bear a special and historic responsibility for the development of civic competence and civic responsibility. Schools can and should provide effective civic education through both formal and informal means from the earliest grades through high school."[3] Therefore, as embodied by the framework, the goal of the NAEP civics assessment is to measure how well American youth are being prepared to meet their citizenship responsibilities.

The design of the 1998 assessment reflects this goal. The framework specifies three interrelated components which, taken together, reflect broad civic competency:

- Knowledge
- Intellectual and participatory skills
- Civic dispositions

Each assessment exercise has a knowledge and intellectual skills component. A portion of the exercises also measures participatory skills and/or civic dispositions.

---

[3] National Assessment Governing Board. (1996). ***Civics framework for the 1998 National Assessment of Educational Progress.*** (p. 7). Washington, DC: Author.

The framework's civic knowledge component draws heavily on the 1994 *National Standards for Civics and Government* developed by the Center for Civic Education and covers the broad range of content that forms the basis of civic understanding.[4] Civic knowledge is divided into five categories that are expressed as questions. That the framework poses the knowledge component as questions reflects the position that civic knowledge encompasses not just factual knowledge but a broader and deeper understanding of the meaning of citizenship. The categories are:

I. What are civic life, politics, and government?

II. What are the foundations of the American political system?

III. How does the government established by the Constitution embody the purposes, values, and principles of American democracy?

IV. What is the relationship of the United States to other nations and to world affairs?

V. What are the roles of citizens in American democracy?

The intellectual and participatory skills component covers those skills of mind and action that allow individuals to apply civic knowledge to good effect. The framework distinguishes three types of intellectual skills, although clearly there is some degree of overlap among them:

- Identifying and describing
- Explaining and analyzing
- Evaluating, taking, and defending positions

The framework seeks to measure students' participatory skills because, ultimately, civic knowledge and intellectual skills are most beneficial when applied to civic participation. Since NAEP cannot directly assess civic participation, the framework specifies that test questions be designed to measure whether students can identify participatory skills, recognize their purpose, explain how to use them, or specify how best to achieve desired results by using particular skills.

---

[4] Center for Civic Education. (1994). *National standards for civics and government*. Calabasas, CA: Author.

The third framework component, civic dispositions, "refers to the traits of private and public character essential to the preservation and improvement of American constitutional democracy." The framework identifies five dispositions:

- Becoming an independent member of society
- Assuming the personal, political, and economic responsibilities of a citizen
- Respecting individual worth and human dignity
- Participating in civic affairs in an informed, thoughtful, and effective manner
- Promoting the healthy functioning of American constitutional democracy

As with participatory skills, it is not within the scope of NAEP to assess students' civic dispositions directly. Therefore, certain assessment exercises are designed to measure students' knowledge and understanding of the importance of civic dispositions.

The new framework for the 1998 civics assessment differs from the *Civics Objectives* for the 1988 assessment in two principal ways.[5] First, whereas the 1988 *Objectives* focused on student understanding of United States government and politics, the 1998 current framework defines civic knowledge more broadly. Reflecting recent scholarship, the framework incorporates the idea that the healthy functioning of democratic society requires participation not only in those organizations and activities directly tied to governmental politics but also in the wide range of voluntary, nongovernmental organizations and activities — unions, religious organizations, clubs, charities, service organizations, and so on — that constitute what is known as "civil society."[6] The second major difference between the 1998 assessment and its predecessor is the inclusion of open-ended (i.e., constructed-response) exercises. In 1988 the assessment at grade 4 consisted entirely of multiple-choice questions, and the assessments at grades 8 and 12 included only one open-ended question. In 1998, as shown in Table i.1, significant portions of the assessment time at all three grades were allotted to open-ended questions.

---

[5] National Assessment of Educational Progress. (1987). *Civics: United States government and policy objectives: 1988 assessment*. Princeton, NJ: Educational Testing Service.

[6] Bahmueller, C.F., Quigley, C.N. (Eds.). (1991). *CIVITAS: A framework for civic education*. Calabasas, CA: Center for Civic Education.

Table i.1

Percentage of civics assessment time by item format, grades 4, 8, and 12: 1998

	Grade 4	Grade 8	Grade 12
Multiple choice	53	61	61
Short constructed response	29	27	30
Extended constructed response	18	12	9

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

The Civics Assessment Instruments

To ensure that the civics assessment instruments conformed as closely as possible to the framework specifications, the development of the 1998 assessment was guided by a special committee (see Appendix C) of civics teachers and teacher educators, some of whom had served on the framework planning committee. All components of the assessment were also evaluated for curricular relevance, developmental appropriateness, and fairness concerns. Five hundred fifty-five questions were field-tested in 1997 and their performance analyzed. Test developers then used the best available questions to meet the criteria established for the 1998 assessment.

Tables i.2 and i.3 show the distribution of assessment time across areas of civic knowledge and intellectual skills, respectively. Every effort was made to create a question pool that met the framework specifications for the distribution of exercises by content and intellectual skills. However, the additional need to balance the pool by exercise format (multiple-choice and open-ended), include questions based on a variety of textual and graphical stimuli, measure participatory skills and civic dispositions, and use questions that had performed best during the field test meant that the distribution of exercises in the 1998 assessment instruments differs somewhat from the distribution specified in the framework.

Table i.2

Percentage distribution of civics assessment time by content area, grades 4, 8, and 12: 1998

	Grade 4	Grade 8	Grade 12
I. What are civic life, politics, and government?	21	8	5
II. What are the foundations of the American political system?	22	28	23
III. How does the government established by the Constitution embody the purposes, values, and principles of American democracy?	15	26	29
IV. What is the relationship of the United States to other nations and to world affairs?	10	14	20
V. What are the roles of citizens in American democracy?	32	24	23

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table i.3

Percentage distribution of civics assessment time by intellectual skills, grades 4, 8, and 12: 1998

	Grade 4	Grade 8	Grade 12
Identifying and describing	33	29	18
Explaining and analyzing	37	38	44
Evaluating, taking, and defending a position	30	33	38

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

For the 1998 assessment, the exercise pools at each grade were divided into 25-minute blocks; six at fourth grade, and eight blocks each at eighth grade and twelfth grade. Each student participating in the assessment received a test booklet that contained two blocks of questions. Although the framework distribution requirements refer to the entire exercise pool at each grade, the blocks were assembled to be roughly similar in terms of difficulty and exercise format. Every block also contained questions from each of the content and intellectual skills categories, but not in equal proportions.

As part of the assessment, students answered general background questions that asked them to identify their gender, race/ethnicity, parents' highest level of education, and other factors such as how often they studied civics or social studies. These background questions were given in separately timed sections. Results from these questions and other background questions given to the teachers and school administrators of participating students are discussed in Chapters 4 and 5.

Description of School and Student Samples

The NAEP 1998 civics assessment was conducted nationally at grades 4, 8, and 12. A representative sample of public and nonpublic school students, selected through stratified random sampling procedures, was assessed. Thus, the results presented in this report are based on representative samples of students. Each selected school that participated in the assessment, and each student assessed, represents a portion of the population of interest. As a result, after adjustment for student and school nonresponses, the findings presented are representative of all fourth, eighth, and twelfth graders in the nation and in the four regions analyzed (Northeast, Southeast, Central, West).

More details on the nature of the accommodations offered to students with disabilities and students with limited English proficiency, and the number of students who received such accommodations, are given in Appendix A. Appendix A also contains information on sample sizes and participation rates for the assessment.

In an effort to expand inclusion in NAEP, the 1998 civics assessment, for the first time, offered testing accommodations to students with disabilities and to students with limited proficiency in English. Some of the accommodations provided were small groups, extended time, and one-on-one administration. A total of 3 percent of fourth-grade students, 3 percent of eighth-grade students, and 1 percent of twelfth-grade students were assessed with accommodations.

Scoring the 1998 Civics Assessment

All student responses to open-ended exercises were scored by specially trained professional raters. Scoring guides were developed for each open-ended exercise in the assessment. Responses to most open-ended questions were scored on either a 3- or 4-point scale, depending on their complexity. Question authors drafted initial scoring guides to reflect the purpose of the exercise. Generally a scoring guide contained a rubric establishing the criteria for receiving different score levels plus a list of credited responses outlining which answers would and would not receive credit. Test developers revised and refined the scoring guides at several stages before the field test, after the field test, and again before the 1998 assessment. The guides were also reviewed by the civics development committee prior to both the field test and the 1998 assessment, and by NAGB and NCES staff and outside reviewers during the two clearance reviews. During the scoring process, 25 percent of all student responses were read by a second rater to ensure a high degree of consistency between raters.

A more detailed description of the NAEP scoring procedure is given in Appendix A.

Reporting the Civics Assessment Results

Because of the nature of the NAEP assessment, which selects a representative sample of students in order to survey the nation, and the breadth of the field of civics, each student participating cannot be expected to respond to all of the exercises in the assessment. That would impose an unreasonable burden on students and their schools. Thus, each student was administered a portion of the assessment, and data were combined across students to report on the achievement of fourth, eighth, and twelfth graders and on the achievement of subgroups of students (e.g., subgroups defined by gender or level of parental education).

Student responses to the civics questions were analyzed to determine the percentage of students responding correctly to each multiple-choice question and the percentage of students responding at each of the score levels for constructed-response questions. Item response theory (IRT) methods were used to produce an overall scale for each of the grades — 4, 8, and 12. Results presented in this report are based on this overall scale.

For each grade, the range of the scale was 0 to 300, and the national average was set at 150. Although the scale-score ranges are identical across grades, the scale was derived independently for each grade. Therefore, average scale scores cannot be compared across grades. For example, equal scale scores on the grade 4 and grade 8 scales do not imply equal levels of civics achievement. However, this scale does make it possible to compare civics scale scores for the nation for subgroups of students at a particular grade. (Additional details of the scaling procedures can be found in Appendix A.)

The average scale score provides information on what students ***know and can do***. In addition to the NAEP civics scale, results are also reported using the civics achievement levels as authorized by the NAEP legislation and adopted by NAGB. The achievement levels are performance standards based on the collective judgments of experts about what students ***should know and be able to do***. The levels were developed by a broadly representative panel that included teachers, education specialists, and members of the general public. For each grade tested, NAGB has adopted three achievement levels: ***Basic***, ***Proficient***, and ***Advanced***. For reporting purposes, the achievement level cut scores for each grade are placed on the NAEP civics scale, resulting in four ranges: below ***Basic***, ***Basic***, ***Proficient***, and ***Advanced***.

The Setting of Achievement Levels

The 1988 NAEP legislation that created the National Assessment Governing Board directed the Board to identify "appropriate achievement goals ... for each subject area" that NAEP measures.[7] The 1994 NAEP reauthorization reaffirmed many of the Board's statutory responsibilities, including "developing appropriate student performance standards for each age and grade in each subject area to be tested under the National Assessment."[8] To follow this directive and achieve the mandate of the 1988 statute "to improve the form and use of NAEP results," the Board undertook the development of student performance standards (called "achievement levels"). Since 1990, the Board has adopted achievement levels for mathematics, reading, U.S. history, world geography, and science, and, most recently, for the 1998 civics and writing assessments.

---

[7] Public Law 100–297. (1988). National Assessment of Educational Progress Improvement Act (20 USC 1221). Washington, DC.

[8] Public Law 103–382. (1994). Improving America's Schools Act (20 USC 9010). Washington, DC.

The Board defined three levels for each grade: *Basic*, *Proficient*, and *Advanced*. The *Basic* level denotes partial mastery of the knowledge and skills that are fundamental for proficient work at a given grade. The *Proficient* level represents solid academic performance. Students reaching this level demonstrate competency over challenging subject matter. The *Advanced* level signifies superior performance at a given grade. For each grade, the levels are cumulative; that is, abilities achieved at the *Proficient* level presume mastery of abilities associated with the *Basic* level, and attainment of the *Advanced* level presumes mastery of both the *Basic* and *Proficient* levels. Figure i.1 presents the policy definitions of the achievement levels that apply across grades and subject areas. (Specific descriptions of civics achievement for the levels at each grade are presented in Chapter 1.) Adopting three levels of achievement for each grade signals the importance of looking at more than one standard of performance. The Board believes, however, that all students should reach the *Proficient* level; the *Basic* level is not the desired goal, but rather represents partial mastery that is a step toward *Proficient*.

Figure i.1

Achievement level policy definitions

Basic	This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
Proficient	This level represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
Advanced	This level signifies superior performance.

The achievement levels in this report were adopted by the Board based on a standard-setting process designed and conducted under a contract with ACT, Inc. To develop these levels, ACT convened a cross-section of educators and interested citizens from across the nation and asked them to judge what students should know and be able to do relative to the view of civics reflected in the NAEP assessment framework for civics. This achievement-level-setting process was reviewed by an array of individuals, including policymakers, representatives of political organizations, teachers, parents, and other members of the general public. Prior to adopting these levels of student achievement, NAGB engaged a large number of persons to comment on the recommended levels and to review the results.

The results of the achievement-level-setting process, after NAGB approval, are a set of achievement level descriptions and a set of achievement level cut-points on the 300-point NAEP scale for civics, as well as a set of exemplars of student performance at each achievement level. The cut points are the scores that define the boundaries between below *Basic*, *Basic*, *Proficient*, and *Advanced* performance at grades 4, 8, and 12. Further details of the achievement-level-setting process will be available in the forthcoming *NAEP 1998 Technical Report*.

The Developmental Status of Achievement Levels

The 1994 NAEP reauthorization law requires that the achievement levels be used on a developmental basis until the Commissioner of Education Statistics determines that the achievement levels are "reasonable, valid, and informative to the public."[9] Until that determination is made, the law requires the Commissioner and the Board to make clear the developmental status of the achievement levels in all NAEP reports.

In 1993, the first of several congressionally mandated evaluations of the achievement-level-setting process concluded that the procedures used to set the achievement levels were flawed, and that the percentage of students at or above any particular achievement level cut point may be underestimated.[10] Others have critiqued these evaluations, asserting that the weight of the empirical evidence does not support such conclusions.[11]

---

[9] The Improving America's Schools Act of 1994 (20 USC 9010) requires that the Commissioner base his or her determination on a congressionally mandated evaluation by one or more nationally recognized evaluation organizations, such as the National Academy of Education (NAE) or the National Academy of Sciences (NAS).

[10] United States General Accounting Office. (1993). *Education achievement standards: NAGB's approach yields misleading interpretations.* U.S. General Accounting Office Report to Congressional Requestors. Washington, DC: Author.

National Academy of Education. (1993). *Setting performance standards for achievement: A report of the National Academy of Education Panel on the evaluations of the NAEP Trial State Assessment: An evaluation of the 1992 achievement levels.* Stanford, CA: Author

[11] Cizek, G. (1993). *Reactions to National Academy of Education report.* Washington, DC: National Assessment Governing Board.

Kane, M. (1993). *Comments on the NAEP evaluation of the NAGB achievement levels.* Washington, DC: National Assessment Governing Board.

In response to the evaluations and critiques, NAGB conducted an additional study of the 1992 achievement levels in reading before deciding to use those levels for reporting 1994 NAEP results.[12] When reviewing the findings of this study, the National Academy of Education (NAE) Panel expressed concern about what it saw as a "confirmatory bias" in the study and about the inability of this study to "address the panel's perception that the levels had been set too high."[13]

In 1997, the NAE Panel summarized its concerns with interpreting NAEP results based on the achievement levels as follows:

> *First, the potential instability of the levels may interfere with the accurate portrayal of trends. Second, the perception that few American students are attaining the higher standards we have set for them may deflect attention to the wrong aspects of education reform. The public has indicated its interest in benchmarking against international standards, yet it is noteworthy that when American students performed very well on a 1991 international reading assessment, these results were discounted because they were contradicted by poor performance against the possibly flawed NAEP reading achievement levels in the following year.*[14]

The NAE Panel report recommended "that the current achievement levels be abandoned by the end of the century and replaced by new standards ...." The National Center for Education Statistics and the National Assessment Governing Board have sought and continue to seek new and better ways to set performance standards on NAEP. For example, NCES and NAGB jointly sponsored a national conference on standard setting in large-scale assessments, which explored many issues related to standard setting.[15] Although new directions were presented and discussed, a proven alternative to the current process has not yet been identified. The Acting Commissioner of Education Statistics and NAGB continue to call on the research community to assist in finding ways to improve standard setting for reporting NAEP results.

---

[12] American College Testing. (1995). *NAEP reading revisited: An evaluation of the 1992 achievement level descriptions*. Washington, DC: National Assessment Governing Board.

[13] National Academy of Education. (1996). Reading achievement levels. In *Quality and utility: The 1994 Trial State Assessment in reading. The fourth report of the National Academy of Education Panel on the evaluation of the NAEP Trial State Assessment*. Stanford, CA: Author.

[14] National Academy of Education. (1997). *Assessment in transition: Monitoring the nation's educational progress* (p. 99). Mountain View, CA: Author.

[15] National Assessment Governing Board and National Center for Education Statistics. (1995). *Proceedings of the Joint Conference on Standard Setting for Large-Scale Assessments of the National Assessment Governing Board (NAGB) and the National Center for Education Statistics (NCES)*. Washington, DC: Government Printing Office.

BEST COPY AVAILABLE

The most recent congressionally mandated evaluation conducted by the National Academy of Sciences (NAS) relied on prior studies of achievement levels, rather than carrying out new evaluations, on the grounds that the process has not changed substantially since the initial problems were identified. Instead, the NAS Panel studied the development of the 1996 science achievement levels. The NAS Panel basically concurred with earlier congressionally mandated studies. The Panel concluded that "NAEP's current achievement-level-setting procedures remain fundamentally flawed. The judgment tasks are difficult and confusing; raters' judgments of different item types are internally inconsistent; appropriate validity evidence for the cut scores is lacking; and the process has produced unreasonable results."[16]

The NAS Panel accepted the continuing use of achievement levels in reporting NAEP results only on a developmental basis, until such time as better procedures can be developed. Specifically, the NAS Panel concluded that "... tracking changes in the percentages of students performing at or above those cut scores (or in fact, any selected cut scores) can be of use in describing changes in student performance over time."[17]

The National Assessment Governing Board urges all who are concerned about student performance levels to recognize that the use of these achievement levels is a developing process and is subject to various interpretations. The Board and the Acting Commissioner of Education Statistics believe that the achievement levels are useful for reporting on trends in the educational achievement of students in the United States. In fact, achievement level results have been used in reports by the President of the United States, the Secretary of Education, state governors, legislators, and members of Congress. The National Education Goals Panel and government leaders in the nation and in more than 40 states use these results in their annual reports.

Based on the congressionally mandated evaluations so far, the Acting Commissioner agrees with the recommendation of the National Academy of Sciences to exercise caution in the use of the current achievement levels. Therefore, the Acting Commissioner concludes that these achievement levels should continue to be considered developmental and should continue to be interpreted and used with caution.

---

[16] Pellegrino, J.W., Jones, L.R., & Mitchell, K.J. (Eds.). (1999). *Grading the nation's report card: Evaluating NAEP and transforming the assessment of educational progress.* Committee on the Evaluation of National Assessments of Educational Progress, Board on Testing and Assessment, Commission on Behavioral and Social Sciences and Education, National Research Council. (p. 182). Washington, DC: National Academy Press.

[17] *Ibid.*, page 176. (For an opposing viewpoint see Hambleton, R.K., Brennan, R.L., Brown, W., Dodd, B., Forsyth, R.A., Mehrens, W.A., Nellhaus, J., Reckase, M., Rindone, D., van der Linder, W.J., & Zwick, R. (1999). *A response to "Setting reasonable and useful performance standards" in the National Academy of Sciences' Grading the nation's report card.* Amherst, Massachusetts: University of Massachusetts, Laboratory of Psychometric and Evaluative Research.)

Interpreting NAEP Results

The average scores and percentages presented in this report are estimates because they are based on samples rather than testing an entire population. As such, the results are subject to a measure of uncertainty, reflected in the standard errors of the estimates. Also reflected in the standard errors are errors of measurement that are associated with any measurement instrument. The standard errors for the estimated scale scores and percentages provided throughout this report are provided in Appendix B.

The differences between scale scores or percentages discussed in the following chapters take into account the standard errors associated with the estimates. The comparisons are based on statistical tests that consider both the magnitude of the difference between the group average scores or percentages and the standard errors of these statistics. Throughout this report, differences are defined as significant when they are significant from a statistical perspective. This means that observed differences are unlikely to be due to chance factors associated with sampling variability. The term "significant" is not intended to imply a judgment about the absolute magnitude or educational relevance of the differences. It is intended to identify statistically dependable population differences in order to help focus subsequent dialogue among policymakers, educators, and the public. All differences reported are significant at the .05 level, with appropriate adjustments for multiple comparisons.

Cautions in Interpretation

The reader is cautioned against using the NAEP results in this report to make simple causal inferences related to subgroup performance, to the relative effectiveness of public and nonpublic schools, or to other educational variables discussed in this report. A relationship that exists between performance and another variable does not reveal the underlying cause of that relationship, which may be influenced by a number of other variables. Differences in civics performance may reflect a range of socioeconomic and educational factors not discussed in this report or addressed by the NAEP assessment program. Similarly, differences between public and nonpublic schools may be better understood by considering such factors as composition of the student body and parental involvement. Finally, differences in civics performance may reflect not only the effectiveness of education programs, but also the challenges posed by economic constraints and student demographic characteristics.

CHAPTER 1

Average Scale Score and Achievement Level Results for the Nation

Overview

This chapter presents overall results of the 1998 NAEP civics assessment for all fourth, eighth, and twelfth graders across the nation. Chapters 2 and 3 provide results for subgroups of students. As discussed in the Introduction to this report, student performance on the civics assessment is described in two ways: 1) in terms of average scores on the NAEP civics scale, and 2) in terms of the percentages of students attaining the three levels of achievement in civics. The NAEP civics scale ranges from 0 to 300. The three civics achievement levels are *Basic*, *Proficient*, and *Advanced*.

This chapter also presents sample questions and student responses from the assessment. These questions and responses were selected to exemplify performance within each achievement level range. Three questions are presented for each grade assessed — one at each achievement level.

Average Scale Score Results for the Nation

The NAEP civics assessment provides a measure of students' knowledge and understanding of civics. The average performance of students in each grade assessed is expressed in terms of the average score on the NAEP civics scale. As noted above, the civics scale ranges from 0 to 300, and the national average at each grade is 150. The NAEP civics scale can be used to compare the performance of subgroups of students within a grade (for example, male eighth graders compared to female eighth graders). Within-grade scale score comparisons of subgroups of students are presented in Chapter 2 of this report. The scale does not allow for comparisons of performance across grades (for example, fourth graders compared to eighth graders) because each grade was scaled separately. Additional information about the scaling procedures for the 1998 NAEP civics assessment can be found in Appendix A of this report and in the forthcoming *NAEP 1998 Technical Report*.

BEST COPY AVAILABLE

Table 1.1 presents the civics scale scores for students at the 10th, 25th, 50th, 75th, and 90th percentiles at each grade. These data provide some indication of the range of student performance, from lower performance (10th percentile) to higher performance (90th percentile).

Table 1.1

Civics scale scores by percentiles: 1998

	Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
Grade 4	150	102	128	153	175	192
Grade 8	150	103	128	153	175	192
Grade 12	150	103	128	153	175	192

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Achievement Level Results for the Nation

In addition to describing student performance in terms of average scale scores, the assessment results can be examined according to students' attainment of the three civics achievement levels as authorized by the NAEP legislation[1] and as adopted by the National Assessment Governing Board (NAGB). Viewing students' performance from this perspective provides some insight into the adequacy of students' knowledge and skills and the extent to which they achieved expected levels of performance.

In 1999, NAGB reviewed and adopted the recommended civics achievement levels of *Basic*, *Proficient*, and *Advanced* that, for reporting purposes, are placed on the NAEP civics scale resulting in the four ranges of performances cited earlier (i.e., below *Basic*, *Basic*, *Proficient*, and *Advanced*). Figures 1.1 through 1.3 present in bold type the specific descriptions of civics achievement levels at each grade. In the description of each achievement level, the portion in regular type presents a summary of the complete description of that level. The numbers in parentheses are the scale scores marking the boundary for each level on the 0–300 scale.

---

[1] The Improving America's Schools Act of 1994 (20 USC 9010) requires that the National Assessment Governing Board develop "appropriate student performance levels" for reporting NAEP results.

Figure 1.1

Civics achievement levels, grade 4: 1998

Basic **(136)** **Fourth-grade students performing at the basic level should have an understanding of what government is and what it does, and they should be able to identify some things that government is not allowed to do. These students should have some understanding of the foundations of the American political system. In the context of their school and community, they should understand rules and laws, rights and responsibilities, and ways to participate in governing. These students should know that the world is divided into many countries.**

Fourth-grade students performing at the basic level should have some understanding of what government is and what it does, and they should be able to identify some things that government is not allowed to do. They should be able to explain purposes of rules in the school and the community, and to describe what happens when people break laws. These students should understand how national holidays and symbols such as the flag, the Statue of Liberty, and the Fourth of July reflect shared American values, and they should be able to identify different types of diversity in American society. They should be able to describe ways to settle disagreements or conflicts peacefully. They should be able to name the president and their state governor and to identify rights and responsibilities of a citizen. They should know some ways that students can participate in governing their school and community, and they should be able to describe qualities of a good leader. Finally, these students should know that the world is divided into many countries.

Proficient **(177)** **Fourth-grade students performing at the proficient level should have a good understanding of what the American government does and of why it is not allowed to act in certain ways. These students should have an age-appropriate understanding of the foundations of the American political system. They should understand purposes of laws, ways shared beliefs unify Americans, what it means to be a citizen, and rights and responsibilities of citizens, and the idea of public participation in governing. These students should be able to describe ways in which countries interact with one another.**

Fourth-grade students performing at the proficient level should have a good understanding of what the American government does and of why it is not allowed to act in certain ways. They should be able to explain why we have laws. These students should be able to recognize diversity in American society and that Americans are united by shared beliefs and principles. They should know that the Constitution and the Declaration of Independence are founding documents of American democracy. They should be able to explain how people make decisions about the ways they live together in a democracy and how groups in schools and communities can manage conflict peacefully. They should know what it means to be a citizen of their state and the nation, and they should be able to distinguish between rights and responsibilities of citizens. They should understand why it is important for people to participate in governing their school and community. Finally, these students should be able to describe ways in which countries interact with one another.

Advanced **(215)** **Fourth-grade students performing at the advanced level should understand and be able to explain some purposes of government. When given age-appropriate examples, they should recognize differences between power and authority and between limited and unlimited government. They should be able to explain the importance of shared values in American democracy, to identify ways citizens can participate in governing, and to understand that with rights come responsibilities. They should be able to explain how nations benefit when they resolve conflicts peacefully.**

Fourth-grade students performing at the advanced level should understand and be able to explain some purposes of government. They should recognize differences between power and authority when given examples and should understand differences between limited and unlimited government. These students should be able to explain why it is important that citizens share a commitment to the values of American democracy, and they should be aware of the benefits and challenges of both unity and diversity in American society. They should be able to distinguish between services provided by local and state levels of government. These students should be able to describe how government can make it possible for people to accomplish goals they could not achieve alone. They should be able to identify ways in which citizens can keep track of their government's actions, and they should understand the connection between rights and responsibilities of a citizen. Finally, they should be able to explain how nations benefit when they resolve conflicts peacefully.

SOURCE: National Assessment Governing Board. Policy adopted May 15, 1999 at quarterly meeting. Washington, DC.

BEST COPY AVAILABLE

Figure 1.2

Civics achievement levels, grade 8: 1998

Basic
(134)

Eighth-grade students performing at the basic level should have some understanding of competing ideas about purposes of government, and they should be able to describe advantages of limited government. They should be able to define government, constitution, the rule of law, and politics. They should be able to identify the fundamental principles of American democracy and the documents from which they originate, and they should understand the importance of a shared commitment to the core values of American democracy. They should recognize the components of the political process and understand personal, political, and economic rights and responsibilities. They should be able to describe the purposes of some international organizations.

Eighth-grade students performing at the basic level should have some understanding of competing ideas about purposes of government, and they should be able to describe advantages of limited government. They should be able to define what is meant by government, constitution, the rule of law, and politics. These students should be able to identify fundamental principles and values of American democracy, such as federalism, the separation of powers, checks and balances, government by the consent of the governed, and individual rights. They should understand that the Declaration of Independence and the United States Constitution including the Bill of Rights and other Amendments are sources of these ideas. These students should be able to explain why it is important that citizens share the values and principles expressed in the nation's core documents, and they should understand functions of elections, political parties, and interest groups in a democratic society. They should know that American citizenship is attained by birth or through naturalization. They should be able to identify personal, political, and economic rights of Americans and should understand the responsibilities that these rights imply. Finally, these students should be able to describe purposes of international organizations to which the United States belongs.

Proficient
(178)

Eighth-grade students performing at the proficient level should understand and be able to explain purposes that government should serve. These students should have a good understanding of differences between government and civil society and of the importance of the rule of law. They should recognize discrepancies between American ideals and reality and be able to describe continuing efforts to address them. They should understand the separation and sharing of powers among branches of government and between federal and state governments, and they should be able to explain how citizens influence government. They should be able to describe events within the United States and other countries that have international consequences.

Eighth-grade students performing at the proficient level should have a good understanding of purposes that government should serve, and they should be able to explain why government should serve those purposes. These students should understand differences between government and civil society, and they should be able to explain the importance of the rule of law. They should be able to point out ways in which ideals expressed in the nation's core documents differ from reality and to identify ways in which these differences continue to be addressed. They should be able to explain how and why legislative, executive, and judicial powers are separate, shared, and limited in the American constitutional government, and they should understand how and why powers are divided and shared between the national and state governments. They should be able to discuss ways that citizens can use the political process to influence government. These students should be able to provide simple interpretations of non-text-based information, like maps, charts, tables, graphs, and cartoons. Finally, these students should be able to describe events in the United States that have influenced other nations, as well as events in other nations that have affected American policy.

Advanced
(213)

Eighth-grade students performing at the advanced level should have a developed understanding of how civil society helps to maintain limited government and why the rule of law is important. These students should have a clear understanding of issues in which democratic values are in conflict and of past efforts to address the discrepancies between American ideals and reality. They should understand how citizens can monitor and influence government and how responsible citizens support democracy. They should recognize the impact of American democracy on other countries, as well as other countries' impact on American politics and society.

Eighth-grade students performing at the advanced level should have a developed understanding of why civil society plays a key role in maintaining a limited government and of the importance of the rule of law in civil society and government. These students should be able to take positions on issues in which fundamental values are in conflict — liberty and equality, individual rights and the common good, and majority rule and minority rights, for example — and they should be able to defend their positions. They should be able to evaluate results of past efforts to address discrepancies between American ideals and national reality and to explain how citizens can monitor and influence local, state, and national government. These students should understand how laws can achieve purposes of American constitutional government, such as promoting the common good and protecting rights of individuals. They should understand how civic dispositions such as civility, tolerance, and respect for law promote the healthy functioning of American constitutional democracy. Finally, these students should understand the impact of American democracy on other countries, as well as the impact of other countries on American politics and society.

SOURCE: National Assessment Governing Board. Policy adopted May 15, 1999 at quarterly meeting. Washington, DC.

BEST COPY AVAILABLE

Figure 1.3

Civics achievement levels, grade 12: 1998

***Basic* (139)** **Twelfth-grade students performing at the basic level should have an understanding of what is meant by civil society, constitutional government, and politics. They should know that constitutional governments can take different forms, and they should understand the fundamental principles of American constitutional government and politics, including functions of political parties and other organizations. They should understand both rights and responsibilities in a democratic society, and they should recognize the value of political participation. They should be familiar with international issues that affect the United States.**

Twelfth-grade students performing at the basic level should have an understanding of what is meant by civil society, constitutional government, and politics. They should know that constitutional governments can take different forms, and they should understand the fundamental principles of American constitutional government. These students should be able to explain ways that political parties, interest groups, and the media contribute to elections, and they should be able to point out sources of information about public policy issues. They should understand that both power and rights must be limited in a free society. They should be able to identify those traits that make people responsible citizens, and they should be able to describe forms of political participation available in a democracy and recognize reasons that such participation is important. These students should be able to provide simple interpretations of non-text-based information, like maps, charts, tables, graphs, and cartoons. Finally, they should be familiar with international issues that affect the United States.

***Proficient* (174)** **Twelfth-grade students performing at the proficient level should have a good understanding of how constitutions can limit the power of government and support the rule of law. They should be able to describe similarities and differences among constitutional systems of government, and they should be able to explain fundamental American democratic values, their applications, and their contribution to expanding political participation. They should understand the structure of American government and be able to evaluate activities of political parties, interest groups, and media in public affairs. They should be able to explain the importance of political participation, public service, and political leadership. They should be able to describe major elements of American foreign policy and the performance of major international organizations.**

Twelfth-grade students performing at the proficient level should have a good understanding of how constitutions can limit the power of government and support the rule of law. They should be able to distinguish between parliamentary systems of government and those based on separate and shared powers, and they should be able to describe the structure and functions of American government. These students should be able to identify issues in which fundamental democratic values and principles are in conflict — liberty and equality, individual rights and the common good, and majority rule and minority rights, for example — and they should be able to take and defend positions on these issues. They should be able to evaluate ways that law protects individual rights and promotes the common good in American society. They should understand how the application of fundamental principles of American constitutional democracy has expanded participation in public life, and they should be able to explain how citizens can work individually and collectively to monitor and influence public policy. These students should understand the importance and means of participation in political life at the national, state, and local levels. They should be able to evaluate contributions made by political parties, interest groups, and the media to the development of public policy, and they should be able to explain how public service and political leadership contribute to American democracy. They should understand how American foreign policy is made and carried out, and they should be able to evaluate the performance of major international organizations. Finally, these students should be able to discuss reasons for and consequences of conflicts that arise when international disputes cannot be resolved peacefully.

***Advanced* (204)** **Twelfth-grade students performing at the advanced level should have a thorough and mature understanding of the strengths and weaknesses of various forms of constitutional democracy. They should be able to explain fully the structure of American government and the political process. They should understand differences between American ideals and realities, and they should be able to explain past and present responses to those differences. They should understand why civic dispositions and individual and collective political actions sustain democracy. They should be able to explain objectives and consequences of American foreign policy.**

Twelfth-grade students performing at the advanced level should have a thorough and mature understanding of the strengths and weaknesses of various forms of constitutional democracy. They should be able to discuss advantages and disadvantages of confederal, federal, and unitary systems of government, as well as strengths and weaknesses of parliamentary systems of government when compared with those based on separate and shared powers. These students should be able to explain how the structure of American government and the nation's social and political cultures serve one another. They should know which level and agency of government to contact to express their opinions or influence public policy. They should be able to explain and evaluate past and present individual and collective political actions aimed at narrowing the gap between American ideals and national reality. They should understand how elections help determine public policies, and they should be able to evaluate public policy issues in which fundamental values and principles are in conflict — liberty and equality, individual rights and the common good, and majority rule and minority rights, for example. These students should be able to evaluate the validity and emotional appeal of past and present political communication. They should be able to explain how civic dispositions such as civility, tolerance, and respect for law are important for preserving democracy, and they should be able to evaluate the many forms of participation in public affairs. Finally, they should be able to explain how American foreign policy is made and carried out and to evaluate its consequences.

SOURCE: National Assessment Governing Board. Policy adopted May 15, 1999 at quarterly meeting. Washington, DC.

BEST COPY AVAILABLE

The NAEP legislation requires that achievement levels be "used on a developmental basis until the Commissioner of Education Statistics determines ... that such levels are reasonable, valid, and informative to the public." A discussion of the developmental status of achievement levels may be found in the Introduction (pages 12–14).

The percentages of students at grades 4, 8, and 12 who performed at or above each of the achievement levels are presented in Table 1.2. In reading Table 1.2, keep in mind that the achievement levels are cumulative. That is, included among students who are considered to be at or above *Basic* are those who also have achieved the *Proficient* and *Advanced* levels of performance, and included among students who are considered to be at or above *Proficient* are those who have attained the *Advanced* level of performance. For example, Table 1.2 shows that the percentage of fourth-grade students at or above *Basic* is 69 percent. The 69 percent includes not only students within the *Basic* level range, but also those whose performance was within the *Proficient* and the *Advanced* ranges.

Table 1.2

Percentage of students at or above the civics achievement levels for the nation: 1998

	Nation			
	Below Basic	**At or above Basic**	**At or above Proficient**	**Advanced**
Grade 4	31	69	23	2
Grade 8	30	70	22	2
Grade 12	35	65	26	4

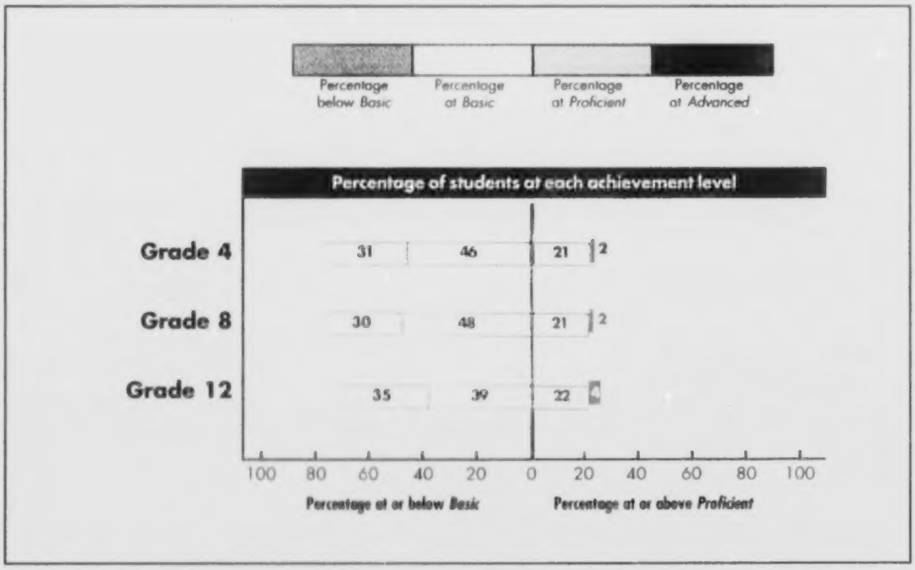
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

As displayed in Table 1.2, about two-thirds of the students in each grade (69, 70 and 65 percent in grades 4, 8, and 12, respectively) were at or above the *Basic* level in civics performance in 1998. Performance at the *Proficient* level — the achievement level identified by the NAGB as the level that all students should reach — was achieved by 23 percent of students at grade 4, 22 percent of students at grade 8, and 26 percent of students at grade 12. The highest level of performance, *Advanced*, was attained by 2 percent of students in grades 4 and 8 and 4 percent of students in grade 12.

Figure 1.4 also shows achievement level results. The percentages in this figure differ from those in the previous table, because they are not cumulative — they represent the percentage of students within each achievement level range, rather than the percentage of students at or above each level. About one in three students at each grade level (31, 30, and 35 percent in grades 4, 8, and 12, respectively) scored in the "below *Basic*" level. At grades 4 and 8, almost half of the students scored in the *Basic* achievement level, while at grade 12, 39 percent of students were in the *Basic* achievement level range.

Figure 1.4

Percentage of students within each civics achievement level range for the nation: 1998



NOTE: Percentages may not add to 100, or to the exact percentages at or above achievement levels, because of rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Sample Questions and Student Responses

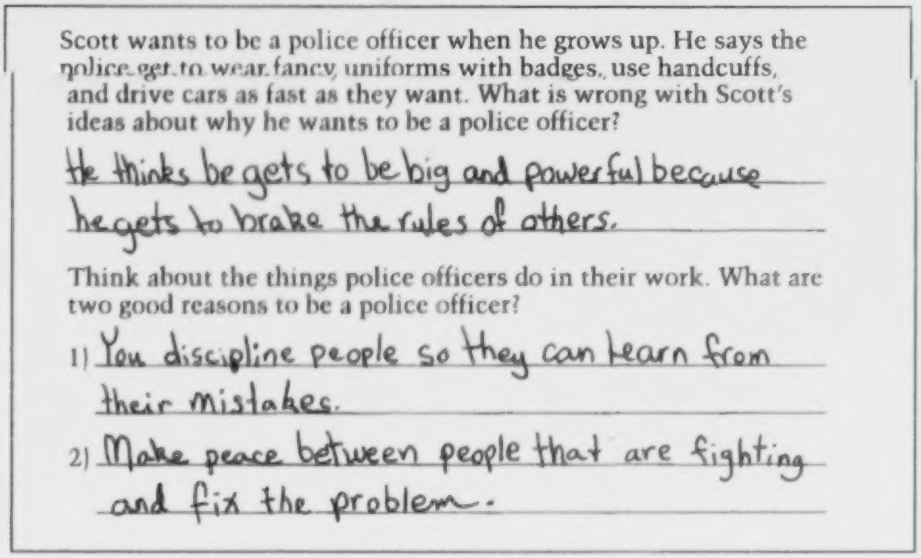
The following pages present sample questions and student responses from the 1998 NAEP civics assessment that exemplify student performance within each of the three achievement level ranges: *Basic*, *Proficient*, and *Advanced*. One sample question for each achievement level is presented for each of the three grades assessed. An examination of these sample questions and student responses provides some insight into the extent of students' civics knowledge and understanding at each of the achievement levels.

A combination of multiple-choice, short constructed-response, and extended constructed-response questions is included. For each question, the ***aspect of civics*** being assessed by the question is identified. The correct answer is indicated for multiple-choice questions by a star (★). For constructed-response questions, a summary of the scoring criteria used to rate students' responses is provided. Actual student responses have been reproduced from assessment test booklets. The rating assigned to each response is also indicated.

The tables included with each exemplary question provide two types of information about students' performance on that question. First, the overall percentage of students who answered successfully is provided. This is the percentage of all students, regardless of achievement level performance, who were able to answer the question correctly. This overall percentage of students includes those who were below *Basic*, as well as students whose performance fell within the three achievement level ranges. Second, the percentage of students within each of the three achievement level ranges — *Basic*, *Proficient*, and *Advanced* — who answered successfully is provided. These percentages give some indication of how difficult the question was for students who performed at each achievement level. The scale score ranges that correspond to the achievement level ranges are provided for reference.

Over 100 test questions released from the 1998 NAEP civics assessment are available for viewing on the NAEP website at http://www.nces.ed.gov/nationsreportcard/itmrls/intro.shtml. In addition, the item-viewing feature of the website includes detailed scoring guides (rubrics) for the constructed response questions, sample student responses, and student performance data.

Grade 4 *Basic* Level – Sample Question and Response



Scott wants to be a police officer when he grows up. He says the police get to wear fancy uniforms with badges, use handcuffs, and drive cars as fast as they want. What is wrong with Scott's ideas about why he wants to be a police officer?

He thinks he gets to be big and powerful because he gets to brake the rules of others.

Think about the things police officers do in their work. What are two good reasons to be a police officer?

1) You discipline people so they can learn from their mistakes.

2) Make peace between people that are fighting and fix the problem.

This constructed-response question is designed to measure fourth-grade students' ability to make distinctions between power and authority. The response received a score of 3, or "Acceptable," on a four-point scale in which a score of 4 was considered "Complete" and a score of 1 was considered "Unacceptable." The first part of the response did not receive credit because its meaning was unclear. However, both reasons for being a police officer were credited.

Table 1.3 **Grade 4: *Functions and purpose of government***

	Percentage "Acceptable" or better within achievement level ranges		
Overall percentage "Acceptable" or better	*Basic* 136–176*	*Proficient* 177–214*	*Advanced* 215 and above*
67	71	87	***

* NAEP civics scale range.
*** Sample size is insufficient to permit a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Grade 4 *Proficient* Level – Sample Question

11. Which of the following is the most important reason why the United States trades with other countries?

Ⓐ People get a chance to travel.

★ Ⓑ It helps people get the things they need.

Ⓒ It helps us learn about other cultures.

Ⓓ We can learn other languages.

This question is designed to measure whether fourth-grade students understand the concept of international trade. Options A, C, and D may all be by-products of trade with other countries, but option B is clearly the "most important" reason for trade. Fourth graders at the *Proficient* level were likely to choose the correct response.

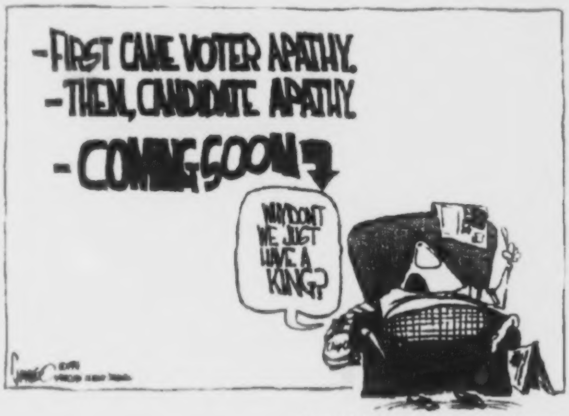
Table 1.4 Grade 4: *Relationship of the U.S. to other nations and to world affairs*

Overall percentage "Correct"	Percentage "Correct" within achievement level ranges		
	Basic 136–176*	*Proficient* 177–214*	*Advanced* 215 and above*
49	49	70	***

* NAEP civics scale range.
*** Sample size is insufficient to permit a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Grade 4 *Advanced* Level – Sample Question

Question 7 refers to the cartoon below. The word *apathy* in the cartoon means "not caring."


-FIRST CAME VOTER APATHY.
-THEN, CANDIDATE APATHY.
-COMING SOON
WHY DON'T WE JUST HAVE A KING?

Copyright © 1991 Cammus in Saratoga Herald Journal

What is the message of the cartoon?

★ Ⓐ Democracy could be in danger if people do not vote.

Ⓑ People like to get all of their political ideas from television.

Ⓒ People do not care whether they have the right to freedom of speech.

Ⓓ It is hard to be a candidate for President.

In this question, students were asked to interpret a cartoon about the relationship between democracy and civic participation and to answer a multiple-choice question based on it. Students, particularly at the younger grades, tended to find political cartoons difficult to understand. In this case, the presence of a cartoon coupled with a sophisticated concept led to low percentages of students answering correctly.

Table 1.5 **Grade 4: *Roles of U.S. citizens in American democracy***

Overall percentage "Correct"	Percentage "Correct" within achievement level ranges		
	Basic 136–176*	*Proficient* 177–214*	*Advanced* 215 and above*
26	26	35	***

* NAEP civics scale range.
*** Sample size is insufficient to permit a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Grade 8 *Basic* Level – Sample Question

Two countries both claim that an island in the Pacific Ocean belongs to them. The countries are preparing to go to war with each other over this issue.

What is the United Nations able to do to help end the conflict?

Ⓐ Send weapons to both sides.

Ⓑ Disarm the militaries of both countries.

★ Ⓒ Arrange for diplomatic negotiations between the two countries.

Ⓓ Force all other countries to stop trading with the two countries.

Eighth graders at the *Basic* level were likely to choose the correct option to this multiple-choice question. It falls within the content category United States and its relationship to other countries and world affairs. Specifically, it is designed to measure students' understanding of powers and limitations of the United Nations as an arbiter of international conflict.

Table 1.6 **Grade 8: *Relationship of the U.S. to other nations and to world affairs***

Overall percentage "Correct"	Percentage "Correct" within achievement level ranges		
	Basic 134–177*	*Proficient* 178–212*	*Advanced* 213 and above*
77	84	94	***

* NAEP civics scale range.

*** Sample size is insufficient to permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Grade 8 *Proficient* Level – Sample Question

This question refers to the passage below:

> When two [people] come into [the Supreme] Court, one may say: "an act of Congress means this." The other may say it means the opposite. We [the Court] then say it means one of the two or something else in between. In that way we *are* making the law, aren't we?
>
> —Earl Warren, Chief Justice of the Supreme Court

Some people are troubled by the role of the Court described by Chief Justice Warren. Which argument could they effectively use against it?

★ Ⓐ It is dangerous to give nonelected officials such as judges so much power in the government.

Ⓑ The Supreme Court makes it too difficult for the federal government to exercise its power over the states.

Ⓒ Supreme Court judges are the members of society most capable of making decisions about social policy.

Ⓓ The main task of the Supreme Court is to rewrite the Constitution to respond to modern problems.

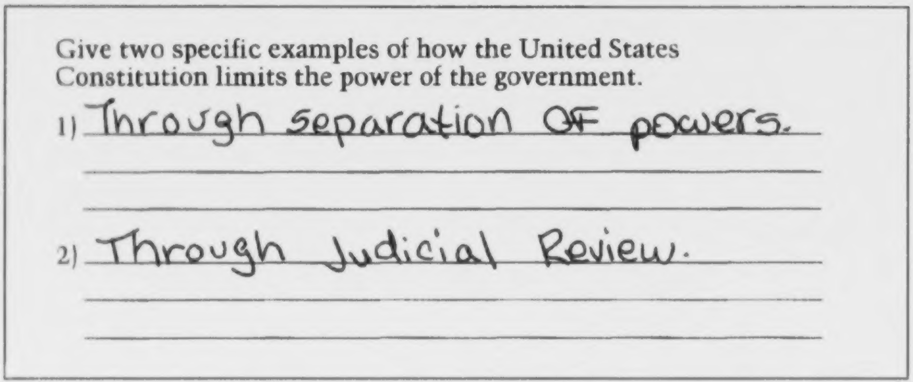
This multiple-choice question is the second of a two-question set covering the general theme of the distribution and sharing of powers by the three branches of the federal government. Both questions refer to the quote from Chief Justice Warren. The first question asks students to identify that Warren was writing about judicial review. The question shown here probes more deeply so that students can demonstrate an understanding of the conflicting views on the power exercised by the courts. Students found the question to be fairly difficult.

Table 1.7 **Grade 8: *Foundations of the American political system***

Overall percentage "Correct"	Percentage "Correct" within achievement level ranges		
	Basic 134–177*	*Proficient* 178–212*	*Advanced* 213 and above*
31	26	56	***

* NAEP civics scale range.
*** Sample size is insufficient to permit a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Grade 8 *Advanced* Level – Sample Question and Response



Give two specific examples of how the United States Constitution limits the power of the government.

1) Through separation OF powers.

2) Through Judicial Review.

The constructed-response question shown here is a straightforward attempt to measure students' understanding of the ways in which the United States Constitution limits the power of the government. The question was scored on a three-point scale. A "Complete" response had to provide two distinct ways in which the Constitution limits government. A "Partial" response had to give one way the Constitution limits government. An "Unacceptable" response did not describe any ways in which the Constitution limits government. A "Complete" score could not be earned if the answer to one part of the question was a subset of the answer to the other part. For example, a response of "Bill of Rights" and "freedom of speech" would receive partial credit because freedom of speech is found within the Bill of Rights. The response above received a score of "Complete" because it provided two different and correct answers.

Table 1.8 **Grade 8: *Foundations of the American political system***

Overall percentage "Complete"	Percentage "Complete" within achievement level ranges		
	Basic 134–177*	*Proficient* 178–212*	*Advanced* 213 and above*
13	10	29	***

* NAEP civics scale range.
*** Sample size is insufficient to permit a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Grade 12 *Basic* Level – Sample Question

This question refers to the statement below:

> The United States is not a fully democratic country. The framers of the Constitution created a system in which majorities — even large majorities or their representatives in Congress — do not have the right to do anything and everything they want.

The framers of the Constitution wanted to limit the power of majorities in order to

Ⓐ encourage the growth of political parties

Ⓑ ensure that state governments would remain weak

Ⓒ enable the government to act quickly in times of crisis

★Ⓓ protect the rights of individuals and minorities

This question is the second of a two-question set based on a short passage about the power of majorities in the United States. Although the passage is not essential to answering the question, it is intended to help stimulate student thinking. The question covers the idea, found under the Foundations of the American Political System portion of the Framework, that the Constitution legitimizes majority rule in certain key areas of decision-making, but limits the power of majorities in order to protect the rights of individuals.

Table 1.9 **Grade 12: *Foundations of the American political system***

Overall percentage "Correct"	Percentage "Correct" within achievement level ranges		
	Basic 139–173*	*Proficient* 174–203*	*Advanced* 204 and above*
72	78	93	97

* NAEP civics scale range.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Grade 12 *Proficient* Level – Sample Question and Response

This question refers to the passage below:

> "Absolute arbitrary power, or governing without settled laws, can neither of them be consistent with the ends of society and government."
>
> — John Locke

List two ways the American system of government is designed to prevent "absolute arbitrary power" and "governing without settled laws."

1) The system of checks and balances prevents a certain branch of government from getting too powerful.

2) The amendment process allows laws to be added or altered to fit the best needs of citizens

This open-ended question is the second in a two-question set based on the quote from Locke. The quote does not refer to the United States in particular, but students are expected to explain how Locke's idea is manifested in the United States constitutional system.

The question was scored on a 3-point scale in which a "Complete" response correctly lists two ways that the American government is designed to prevent the problems mentioned by Locke, a "Partial" response lists one way, and an "Unacceptable" response does not give any ways. The response above received a score of "Complete" because both parts mention aspects of the United States constitutional system that are designed to prevent absolute arbitrary power and governing without settled laws.

Table 1.10 **Grade 12: *Functions and purpose of government***

Overall percentage "Complete"	Percentage "Complete" within achievement level ranges		
	Basic 139–173*	*Proficient* 174–203*	*Advanced* 204 and above*
25	24	51	75

* NAEP civics scale range.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Grade 12 *Advanced* Level – Sample Question

This question refers to the statement below:

> The United States is not a fully democratic country. The framers of the Constitution created a system in which majorities — even large majorities or their representatives in Congress — do not have the right to do anything and everything they want.

Which aspect of the American system of government shows one of the limits on the power of majorities discussed above?

Ⓐ The ability of Congress to override presidential vetoes

★ Ⓑ The Supreme Court's power to overturn unconstitutional laws

Ⓒ The right of Congress to impeach Presidents and federal judges

Ⓓ The ability of people in many states to vote public initiatives into law

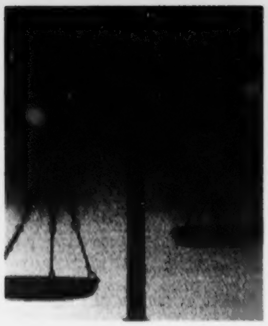
This question was meant to measure students' understanding of the constitutional limits on the power of majorities and to test students' ability to interpret a quote. The question was paired with another multiple-choice question that asked why the framers of the Constitution wanted to limit the power of majorities.

Table 1.11 **Grade 12: *Functions and purpose of government***

Overall percentage "Correct"	Percentage "Correct" within achievement level ranges		
	Basic 139–173*	*Proficient* 174–203*	*Advanced* 204 and above*
30	20	42	85

* NAEP civics scale range.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.



CHAPTER 2

Average Civics Scale Score Results for Selected Subgroups

Overview

This chapter presents average civics scale score results for various subgroups of students. The findings are summarized on the National Assessment of Educational Progress (NAEP) civics scales, which have ranges of 0 to 300 at each grade. The results from each grade are summarized on an independent scale; cross-grade comparisons are not possible.

An examination of the average scores of subgroups provides insight into how general patterns of civics performance are related to certain background characteristics. Results are reported by gender, race/ethnicity, parental education, region, type of location, eligibility for the Free/Reduced-Price School Lunch Program, and type of school. Achievement level results for the same subgroups are presented in Chapter 3.

The only subgroup differences discussed in this report are those that pass tests of statistical significance. These tests consider both the magnitude of the difference between the subgroups' average scores or percentages and the standard errors of the statistics.[1] Readers are reminded, however, that findings of statistical significance are not judgments about the size or educational importance of the differences discussed.

In interpreting subgroup results, readers are reminded that differences in performance reflect a range of socioeconomic and educational factors not discussed in this report or addressed by the NAEP program. Important issues such as opportunities to learn and sociocultural environmental factors must be considered in interpreting differences between groups.[2] Therefore, readers should avoid making simple or causal inferences based on these data.

---

[1] See Appendix A for a more detailed discussion of statistical significance testing procedures.

[2] Stevens, F. (1993). ***Opportunity to learn: Issues of equity for poor and minority students.*** Washington, DC: National Center for Education Statistics.

BEST COPY AVAILABLE

Gender

The 1998 average civics scale scores for males and females are presented in Table 2.1. In this table and in all the tables in this chapter, the percentage of students in each subgroup (for example, the percentage of females in the sample) is presented alongside the average scale score. At grades 8 and 12, female students had higher average scale scores than their male peers. At grade 4, the difference between males and females was not statistically significant. The results of the 1998 NAEP civics assessment differ from the results of previous NAEP surveys in the social studies areas, in which male students outperformed female students (particularly at the twelfth grade).[3]

Table 2.1

Average civics scale scores by gender: 1998

	Percentage of students	Average scale score
Grade 4		
Male	52	149
Female	48	151
Grade 8		
Male	51	148
Female	49	152
Grade 12		
Male	48	148
Female	52	152

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

---

[3] On the 1988 NAEP civics assessment, for example, male students outperformed female students at the twelfth grade. Before interpreting this as a change in gender patterns of performance, however, readers should note that the 1998 assessment was different from its 1988 predecessor. The 1998 assessment used both multiple-choice and open-ended questions throughout, while the 1988 assessment contained only one open-ended exercise. For details, see Appendix A. The results in civics also differ from those in the 1994 NAEP Geography assessment (on which males outperformed females at all three grades), and the 1994 NAEP U.S. History assessment (on which males outperformed females at grade 12).

Race/Ethnicity

As part of the background questionnaire that was administered with the NAEP 1998 civics assessment, students were asked to indicate the racial/ethnic subgroup that best described them. The mutually exclusive response options were: White, Black, Hispanic, Asian/Pacific Islander, and American Indian (including Alaskan Native).

The 1998 average civics scale scores for students in racial/ethnic subgroups are presented in Table 2.2. As in previous assessments in a variety of academic subjects, differences in civics performance among racial/ethnic groups were evident at all three grades. At grade 4, White students had higher average scale scores than children in each of the other ethnic groups. Asian/Pacific Islander students, while scoring at a lower level than their White counterparts, had higher average scale scores than Black, Hispanic, and American Indian students. Finally, Hispanic students scored, on average, at a lower level than Black and American Indian participants.

At grade 8, White students had higher average scale scores than their Black, Hispanic, and American Indian counterparts. Black and Asian/Pacific Islander students both scored, on average, at a higher level than Hispanic eighth graders. While the gaps between eighth-grade Asian/Pacific Islander students and their Black and American Indian counterparts appear substantial, they are not statistically significant.[4]

Among high school seniors, White and Asian/Pacific Islander students scored, on average, at a higher level than Black, Hispanic, and American Indian students. There were no other statistically significant differences among ethnic groups at this grade.

---

[4] While the average scale scores for the Asian/Pacific Islander group are on the order of 20 points higher than those of the other groups, the differences are not statistically significant because the estimates of standard error used in calculating the significance tests are not reliably determined. Standard error estimate of low reliability can result when a large proportion of the data that make up a particular subgroup (in this case, Asian/Pacific Islander students) are clustered in relatively few schools. This occurs with the Asian/Pacific Islander group because certain geographic areas, and individual schools, in the U.S. have high percentages of Asian/Pacific Islander enrollment, but most do not. The reliability of a standard error estimate is quantified by what are referred to as degrees of freedom. See Appendix A (page 128) for the formulae used in estimating degrees of freedom for NAEP significance tests, and a discussion of the impact of clustering effects on the estimation of standard errors.

Table 2.2

Average civics scale scores by race/ethnicity: 1998

	Percentage of students	Average scale score
Grade 4		
White	67	159
Black	15	132
Hispanic	13	126
Asian/Pacific Islander	2	153
American Indian	2	137
Grade 8		
White	67	159
Black	15	133
Hispanic	14	127
Asian/Pacific Islander	3	153
American Indian	1	134
Grade 12		
White	69	158
Black	14	131
Hispanic	12	130
Asian/Pacific Islander	4	151
American Indian	1	129

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Parents' Highest Level of Education

Students were asked to indicate the highest level of education completed by each parent. Four levels of parental education were identified: did not finish high school, graduated from high school, had some education after high school, and graduated from college. The option "I don't know" was also available. For this analysis, the highest education level reported for either parent was used to categorize students.

Previous NAEP assessments in all subject areas have found that student-reported levels of parental education exhibit a positive relationship with student performance. However, some research has questioned the accuracy of student-reported data; therefore, caution should be used in interpreting the findings.[5] In addition, it should be noted that 10 percent of fourth graders, 3 percent of eighth graders, and 1 percent of twelfth graders reported not knowing the education level of their parents.

The results for all levels of student-reported parental education are given in Table 2.3. On the grade 4 civics assessment, the relationship between student reports of parental education and scale scores appeared less pronounced than had been the case on other NAEP surveys.[6] Students at this grade who reported that neither parent had graduated from high school performed, on average, at lower levels than students who reported higher levels of parental education.

At grades 8 and 12 the relationship between student reports of parental education and civics performance appeared stronger than was the case at grade 4. In almost all cases, increases in reported levels of parental education were associated with increases in scale scores. The only exception to this pattern occurred at grade 8, where there was no statistically significant difference between the average performance of students who reported that at least one of their parents was a high school graduate and those who reported some post-high school parental education.

---

[5] Looker, E.D. (1989). Accuracy of proxy reports of parental status characteristics. *Sociology of Education*, 62(4), 257–279.

[6] The 1998 NAEP civics assessment used a different set of questions than past NAEP assessments to determine parents' highest level of education. Consequently, patterns of relationships between this background variable and scale scores may differ slightly from past results.

Table 2.3

Average civics scale scores by parents' highest level of education: 1998

	Percentage of students	Average scale score
Grade 4		
Graduated from college	58	153
Some education after high school	17	150
Graduated from high school	12	153
Did not finish high school	3	124
I don't know.	10	139
Grade 8		
Graduated from college	49	160
Some education after high school	27	143
Graduated from high school	16	144
Did not finish high school	5	123
I don't know.	3	123
Grade 12		
Graduated from college	52	160
Some education after high school	27	145
Graduated from high school	14	140
Did not finish high school	6	124
I don't know.	1	102

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Region of the Country

In addition to providing results for the nation, NAEP assessments traditionally present results for the four regions of the country: Northeast, Southeast, Central, and West. (The composition of the regions is described in Appendix A.) Table 2.4 presents regional results for all three grades.

Comparisons of scale scores among the regions show differing performances across the country. At grades 4 and 8, students in the Northeast and Central regions had higher average scale scores than their peers in the Southeast and West. In addition, fourth graders in the Southeast had higher average scores than their counterparts in the West.

At grade 12, students in the Central region had higher scores than students in the other regions. Also, students in the Northeast performed better than those in the Southeast. There were no other statistically significant differences at this grade.

Table 2.4

Average civics scale scores by region: 1998

	Percentage of students	Average scale score
Grade 4		
Northeast	23	156
Southeast	25	145
Central	24	159
West	27	142
Grade 8		
Northeast	21	155
Southeast	25	143
Central	25	156
West	29	146
Grade 12		
Northeast	23	151
Southeast	23	145
Central	25	157
West	29	148

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Type of Location

Each participating school in the NAEP 1998 civics assessment was classified according to its type of location. The three categories of location used in this report — central city, urban fringe/large town, and rural/small town — are based on Census Bureau definitions. These classifications are strictly geographic (that is, the classifications are made based on the population size and density of a given location); economic characteristics are not taken into account in these categorizations. (The type of location classifications are described in Appendix A.) Table 2.5 presents scale score results for all three grades by type of location.

Comparisons of performance in 1998 showed that fourth- and eighth-grade students in central cities had lower average scale scores than their peers in the other locations. At grade 8, students in rural locations had lower average scale scores than those in urban fringe/large town locations. At grade 12, there were no statistically significant differences among groups defined by type of location.

Table 2.5

Average civics scale scores by type of location: 1998

	Percentage of students	Average scale score
	Grade 4	
Central city	35	144
Urban fringe/large town	35	154
Rural/small town	30	152
	Grade 8	
Central city	33	145
Urban fringe/large town	40	155
Rural/small town	28	149
	Grade 12	
Central city	32	149
Urban fringe/large town	39	152
Rural/small town	30	149

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Eligibility for the Free/Reduced-Price School Lunch Program

The Free/Reduced-Price School Lunch component of the National School Lunch Program, offered through the U.S. Department of Agriculture, is designed to ensure that children near or below the poverty line receive nourishing meals.[7] The program is available to public schools, nonprofit private schools, and residential child-care institutions. Eligibility for free or reduced-price meals is determined through the USDA's Income Eligibility Guidelines and is included in this report as an indicator of poverty. These data are reported to NAEP by the individual schools.

Table 2.6

Average civics scale scores by Free/Reduced-Price School Lunch Program eligibility: 1998

	Percentage of students	Average scale score
Grade 4		
Eligible	33	132
Not eligible	54	160
Information not available *	13	154
Grade 8		
Eligible	26	131
Not eligible	56	157
Information not available *	18	156
Grade 12		
Eligible	14	130
Not eligible	66	153
Information not available *	20	153

* As in other NAEP assessments, performance of students in the "Information not available" category is similar to those in the "Not eligible" category.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

---

[7] U.S. General Services Administration. (1995). *Catalog of federal domestic assistance.* Washington, DC: Executive Office of the President, Office of Management and Budget.

The results for students who took the NAEP civics assessment by eligibility for the Free/Reduced-Price School Lunch Program are given in Table 2.6. At least 33 percent of students at grade 4, 26 percent of students at grade 8, and 14 percent of students at grade 12 were eligible for the program.[8] At all three grades, students who were eligible for the Free/Reduced-Price School Lunch Program had lower average scale scores than students who were not eligible, or where the information was not available.

Type of School

Previous NAEP assessments and other survey research on educational achievement have found significant differences in the performance of students attending public schools and those attending nonpublic schools.[9] However, the reader is cautioned against using NAEP results to make simplistic inferences about the relative effectiveness of public and nonpublic schools. Average performance differences between the two types of schools may be related in part to socioeconomic and sociological factors. For example, some research points to instructional and policy differences between the two types of schools to explain the higher average scores of nonpublic school students,[10] while other studies have suggested that student selection and parental involvement are more significant contributors to performance differences.[11]

Average civics scale scores by type of school are presented in Table 2.7. Schools were classified as either public or nonpublic; nonpublic schools were then further divided into Catholic or other nonpublic schools. At all three grades, students in nonpublic schools had higher average scale scores than their peers in public schools. Examining this difference more closely shows that students in Catholic schools had higher average scale scores than students in public schools at all three grades. Students in other nonpublic schools outperformed those in public schools at grades 4 and 12. The difference at grade 8, while apparently large, was not statistically significant.[12]

---

[8] Information on eligibility was not provided for 13, 18, and 20 percent of students at grades 4, 8, and 12, respectively. Some of those students may also have been eligible for free/reduced-price lunches.

[9] Applebee, A., Langer, J.A., Mullis, I.V.S., Latham, A.S., & Gentile, C. (1994). *NAEP 1992 writing report card.* Washington, DC: National Center for Education Statistics.

Campbell, J.R., Voelkl, K.E., & Donahue, P.L. (1997). *NAEP 1996 trends in academic progress.* Washington, DC: National Center for Education Statistics.

[10] Coleman, J., Hoffer, T., & Kilgore, S. (1982). Cognitive outcomes in public and private schools. *Sociology of Education, 55,* 65-76.

[11] Alexander, K.L. & Pallas, A.M. (1983). Private schools and public policy: New evidence on cognitive achievement in public and private schools. *Sociology of Education, 56,* 170–82.

[12] While the average scale scores for the nonpublic schools group are on the order of 21 points higher than those of the public schools, the differences did not reach statistical significance because the estimates of standard error used in calculating the significance tests are not reliably determined. Standard error estimates of low reliability can result when a large proportion of the data that make up a particular subgroup (in this case, nonpublic school students) are clustered in relatively few schools, or mean scale scores for the group are very disparate between certain school groupings. The reliability of the standard error estimate is quantified by what are referred to as effective degrees of freedom. See Appendix A (page 128) for the formulae used in estimating degrees of freedom for NAEP significance tests.

Table 2.7

Average civics scale scores by type of school: 1998

	Percentage of students	Average scale score
	Grade 4	
Public	88	148
Nonpublic	12	164
Nonpublic: Catholic	8	166
Other nonpublic	4	162
	Grade 8	
Public	89	148
Nonpublic	11	169
Nonpublic: Catholic	6	169
Other nonpublic	5	169
	Grade 12	
Public	88	148
Nonpublic	12	163
Nonpublic: Catholic	8	165
Other nonpublic	3	159

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Summary

For the NAEP 1998 civics assessment, the following patterns of scale score results across subgroups of students were observed:

- Gender: Female students had higher average scale scores than male students at grades 8 and 12.
- Race/ethnicity: At grade 4, White students had higher average scale scores than their Asian/Pacific Islander peers, who in turn had higher average scale scores than their Black, Hispanic, and American Indian counterparts. At this grade, Hispanic students scored at lower average levels than members of other ethnic groups. At grades 8 and 12, White students had higher average scale scores than Black, Hispanic, and American Indian students. At grade 8, Black and Asian/Pacific Islander students scored at higher levels than their Hispanic counterparts. At grade 12, Asian/Pacific Islander students performed at a higher level than their Black, Hispanic, and American Indian peers.
- Parental education: In general, higher levels of parental education were associated with higher levels of student performance, especially at the upper grades. For example, high school seniors who reported higher levels of parental education had higher average scores. This pattern was less pronounced at grade 4, where student reports of parental education are less reliable.
- Region: Students in the Northeast and Central regions had higher average scale scores than those in the Southeast and West at grades 4 and 8. In addition, at grade 4, students in the Southeast outperformed those in the West. At grade 12, students in the Central region outperformed their peers elsewhere, while seniors in the Northeast had higher average scores than those in the Southeast.
- Type of location: At grades 4 and 8, students from schools in urban fringe/large town and rural/small town locations had higher average scale scores than their peers in central city schools. At grade 8, students from schools in urban fringe/large town locations outperformed their peers from schools in rural/small town locations.
- Free/Reduced-Price School Lunch Program eligibility: The NAEP 1998 civics assessment collected information on this federally funded program, an indicator of poverty. Results indicated that, at all three grades, students who were eligible for the Free/Reduced-Price School Lunch Program had lower average scale scores than students who were not eligible.
- Type of school: At all three grade levels, students attending nonpublic schools had higher average scale scores than their counterparts attending public schools.

CHAPTER 3

Civics Achievement Level Results for Selected Subgroups

Overview

In Chapter 2, average civics scale score results were presented for the selected student subgroups: gender, race/ethnicity, parental education, region, type of location, eligibility for the Free/Reduced-Price School Lunch Program, and type of school. This chapter presents achievement level results for these same subgroups. The three civics achievement levels — *Basic*, *Proficient*, and *Advanced* — defined in Chapter 1 are used to report these results.

Gender

The percentages of male and female students attaining the *Basic*, *Proficient*, and *Advanced* levels are given in Table 3.1 and Figure 3.1. Table 3.1 shows the percentage of students ***at or above*** each of the achievement levels. In reading Table 3.1, keep in mind that the levels are cumulative. That is, included among students who are considered to be at or above *Basic* are those who achieved the *Proficient* and *Advanced* levels of performance, and included among students who are considered to be at or above *Proficient* are those who attained the *Advanced* level of performance. Figure 3.1 shows achievement level results in terms of the percentages of students ***within*** each achievement level range. All the tables and figures in this chapter follow these same formats.

BEST COPY AVAILABLE

Different patterns of results were observed at each of the three grades. In Table 3.1, at grade 8, the percentage of students at or above the *Basic* level was higher among females than among males, while comparable percentages of both groups attained the *Proficient* and *Advanced* levels. At grade 12, a higher percentage of females than males were at or above the *Basic* level, but a higher percentage of males than females attained the *Advanced* level. At grade 4, there were no statistically significant differences in the percentages of students attaining any of the three achievement levels.

As shown in Figure 3.1, performance differences between males and females at grades 8 and 12 appeared most evident at the *Basic* level. At grade 8, 51 percent of females were at the *Basic* level and 27 percent were below the *Basic* level. For males, the corresponding percentages were 45 at the *Basic* level and 33 below the *Basic* level. At grade 12, 42 percent of females were at the *Basic* level and 32 percent were below the *Basic* level. For males, the corresponding percentages were 35 at the *Basic* level and 38 below the *Basic* level.

Table 3.1

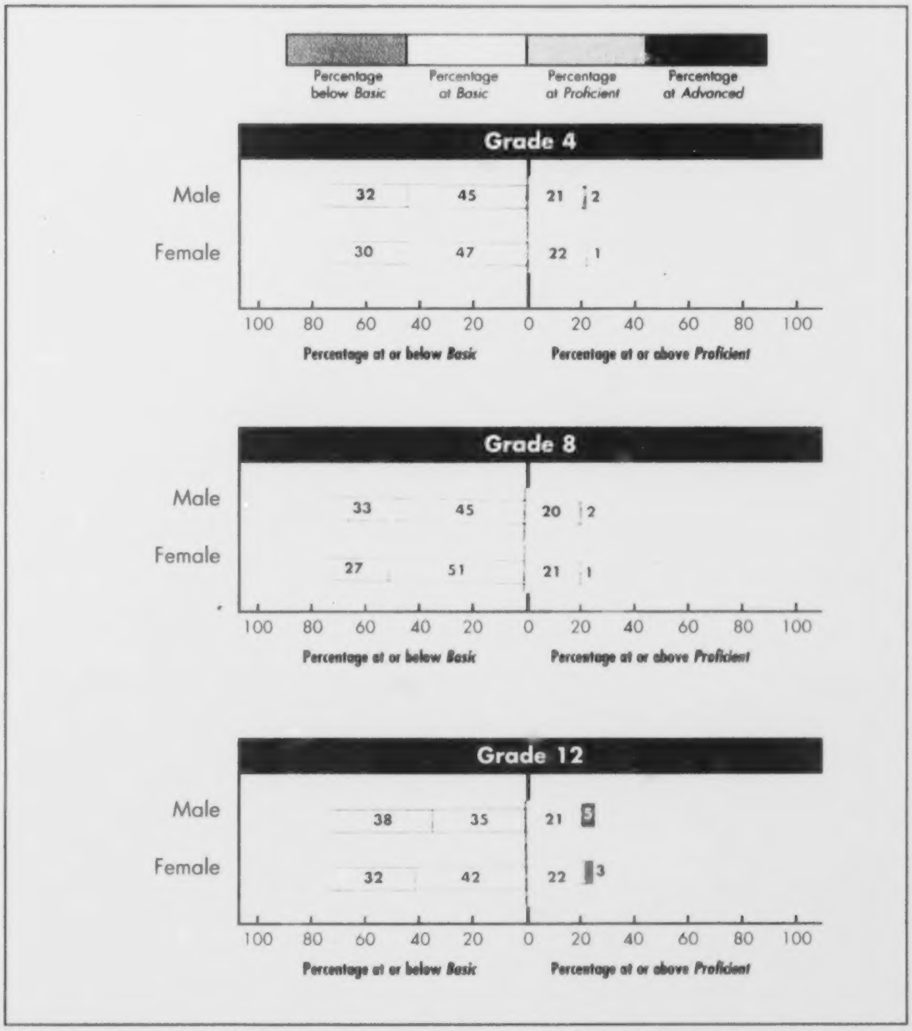
Percentage of students at or above achievement levels in civics by gender: 1998

	Below *Basic*	At or above *Basic*	At or above *Proficient*	*Advanced*
		Grade 4		
Male	32	68	22	2
Female	30	70	23	1
		Grade 8		
Male	33	67	22	2
Female	27	73	22	1
		Grade 12		
Male	38	62	27	5
Female	32	68	26	3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure 3.1

Percentage of students within each achievement level range in civics by gender: 1998



NOTE: Percentages may not add to 100, or to the exact percentages at or above achievement levels, due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Race/Ethnicity

Achievement level results by racial/ethnic group are presented in Table 3.2 and Figure 3.2. The percentages of students performing at or above the three achievement levels are shown in Table 3.2. Differences among racial/ethnic groups were seen at all three grades. The general pattern of results was that the percentages of students at or above each of the achievement levels appeared greater among White and Asian/Pacific Islander students than among the other three racial/ethnic groups. In most instances, these apparent differences were also statistically significant.[1]

At all three grades, the percentages of White students at or above the *Proficient* level were higher than the corresponding percentages of Black, Hispanic, and American Indian students. Similarly, the percentages of Asian/Pacific Islander students at or above the *Proficient* level also appear higher at all three grades than those of Black, Hispanic, and American Indian students. However, the apparent differences between Asian/Pacific Islander students and American Indian students at grades 4 and 12, and between Asian/Pacific Islander students and Black and Hispanic students at grade 12 are not statistically significant.[2]

With one exception, the percentages of White and Asian/Pacific Islander students at or above the *Basic* level are higher than the corresponding percentages of Black, Hispanic, and American Indian students. At grade 12, the apparent difference in percentages at or above the *Basic* level between Asian/Pacific Islander and American Indian students is not statistically significant. Also, White students outperformed their Asian/Pacific Islander counterparts in terms of percentages at or above the *Basic* achievement level at grade 4.

The percentages of students within each achievement level range are displayed in Figure 3.2 At grades 4 and 8, considerable variability across racial/ethnic groups was evident in the percentages in the below *Basic*, *Basic*, and *Proficient* categories. The percentages of fourth- and eighth-grade students at the *Advanced* level were relatively small in all groups, ranging from 0 to 3 percent. Variability in achievement level percentages across racial/ethnic groups was also evident at grade 12. However, the percentages of twelfth-grade

---

[1] At all three grades, the percentages of Black, Hispanic, and American Indian students at the *Advanced* level were quite small. Because of difficulties associated with obtaining accurate standard errors for such small percentages, it was often not possible to carry out significance tests involving *Advanced* level results for these groups.

[2] While the percentages at or above the *Proficient* level for the Asian/Pacific Islander group in Table 3.2 appear substantially higher than the corresponding percentages for the Black, Hispanic and American Indian groups, the differences did not reach statistical significance because the estimates of standard error used in calculating the significance tests are not reliably determined. Standard error estimates of low reliability can result when a large proportion of the data that make up a particular subgroup (in this case, Asian/Pacific Islander students) are clustered in relatively few schools. The reliability of the standard error estimate is quantified by what are referred to as degrees of freedom. See Appendix A (page 128) for the formulae used in estimating degrees of freedom for NAEP significance tests.

Table 3.2

Percentage of students at or above achievement levels in civics by race/ethnicity: 1998

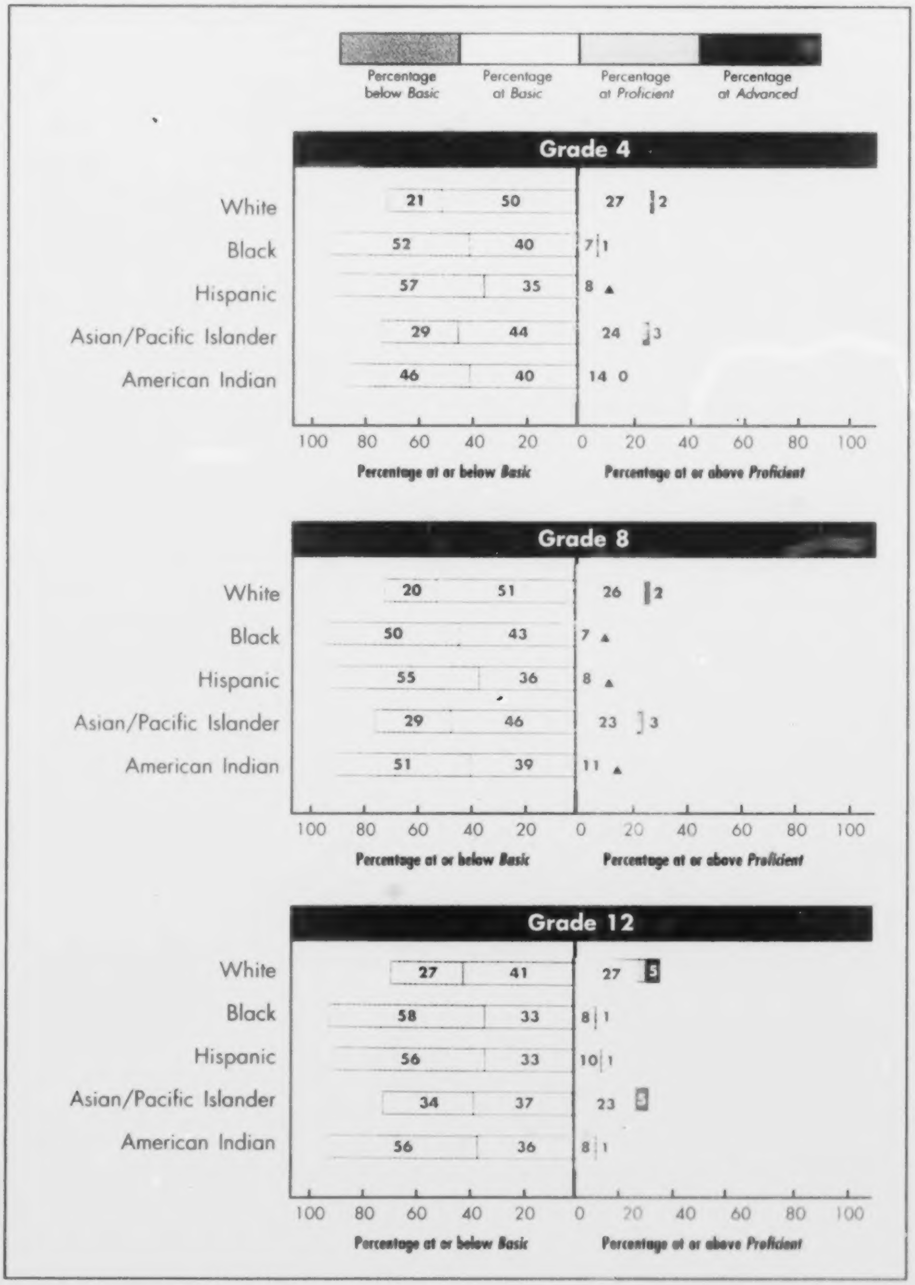
	Below Basic	At or above Basic	At or above Proficient	Advanced
		Grade 4		
White	21	79	29	2
Black	52	48	8	1
Hispanic	57	43	8	▲
Asian/Pacific Islander	29	71	27	3
American Indian	46	54	14	0
		Grade 8		
White	20	80	28	2
Black	50	50	7	▲
Hispanic	55	45	8	▲
Asian/Pacific Islander	29	71	26	3
American Indian	51	49	11	▲
		Grade 12		
White	27	73	33	5
Black	58	42	9	1
Hispanic	56	44	11	1
Asian/Pacific Islander	34	66	28	5
American Indian	56	44	9	1

▲ Percentage is between 0.0 and 0.5.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure 3.2

Percentage of students within each achievement level range in civics by race/ethnicity: 1998



▲ Percentage is between 0.0 and 0.5.

NOTE: Percentages may not add to 100, or to the exact percentages at or above achievement levels, due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

students at the *Basic* level varied little by racial/ethnic group, ranging from 33 percent (among Black and Hispanic students) to 41 percent (among White students). Among the racial/ethnic groups at grade 12, between 1 percent and 5 percent of students performed at the *Advanced* level, with 5 percent of White students and Asian/Pacific Islander students in the *Advanced* category.

Parents' Highest Level of Education

Table 3.3 and Figure 3.3 present achievement level results based on students' reports of their parents' highest level of education. The percentages of students performing at or above the three achievement levels are shown in Table 3.3. The percentages of students within each achievement level range are displayed in Figure 3.3. As shown in Table 3.3, there is some degree of association between student-reported parental education levels and student achievement at all three grades. However, the association is more clearly evident at the higher grade levels.[3]

At grade 4, small percentages of students were at the *Advanced* level, regardless of parental education level, and no statistically significant differences among the groups were evident. The percentages of students at or above the *Proficient* level and at or above the *Basic* level were smaller among students who reported that neither parent graduated from high school than among students who chose the other parental education options.

At grade 8, the percentages of students whose parents graduated from college that were at the *Advanced* level, and at or above the *Proficient* level were higher than the comparable percentages for the other parental education groups.[4] The percentage of eighth-grade students at or above the *Basic* level was highest among students whose parents graduated from college and lowest among students whose parents did not graduate from high school. At grade 12, achievement level results showed a strong association with parental education. Groups with higher parental education levels had higher percentages of students at or above each of the achievement levels.

---

[3] The greater degree of association between parental education level and achievement may be due at least in part, to increased validity of student-reported parental education levels among older children.

[4] The percentage at the *Advanced* level of students whose parents did not graduate high school was almost 0. Because of difficulties associated with obtaining accurate standard errors for such a small percentage, it was not possible to carry out significance tests involving *Advanced* level results for this group.

Table 3.3

Percentage of students at or above achievement levels in civics by parents' highest level of education: 1998

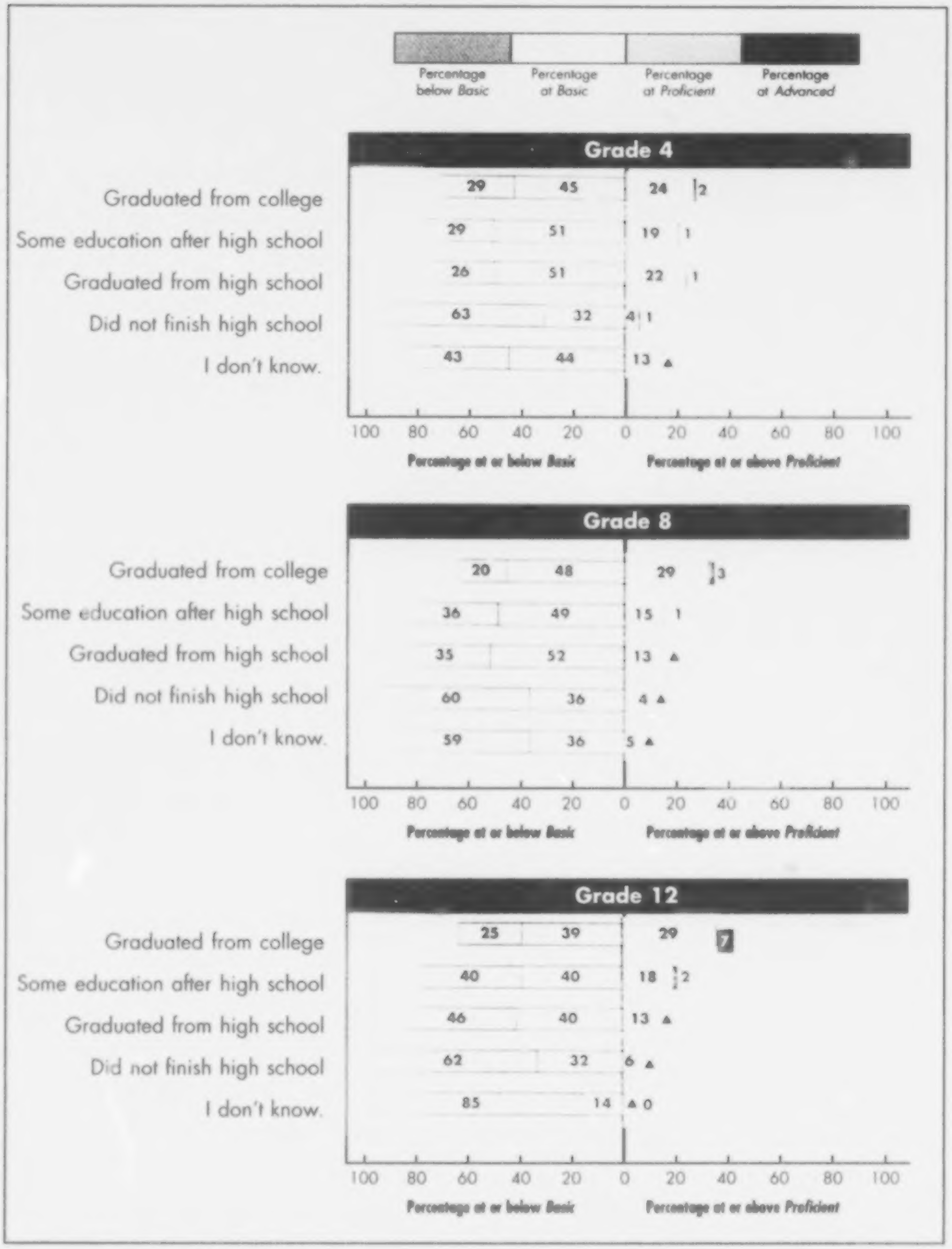
	Below *Basic*	At or above *Basic*	At or above *Proficient*	*Advanced*
		Grade 4		
Graduated from college	29	71	26	2
Some education after high school	29	71	20	1
Graduated from high school	26	74	23	1
Did not finish high school	63	37	5	1
I don't know.	43	57	13	▲
		Grade 8		
Graduated from college	20	80	32	3
Some education after high school	36	64	15	1
Graduated from high school	35	65	14	▲
Did not finish high school	60	40	4	▲
I don't know.	59	41	5	▲
		Grade 12		
Graduated from college	25	75	36	7
Some education after high school	40	60	20	2
Graduated from high school	46	54	14	▲
Did not finish high school	62	38	6	▲
I don't know.	85	15	▲	0

▲ Percentage is between 0.0 and 0.5.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure 3.3

Percentage of students within each achievement level range in civics by parents' highest level of education: 1998



▲ Percentage is between 0.0 and 0.5.

NOTE: Percentages may not add to 100, or to the exact percentages at or above achievement levels, due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Region of the Country

In addition to results for the nation, NAEP achievement level results are provided for four regions of the country: Northeast, Southeast, Central, and West. The percentages of students performing at or above the three achievement levels by region are shown in Table 3.4. (The composition of the regions is described in Appendix A.)

Several differences among regions were observed in the 1998 achievement level results. In each of the four regions, only modest percentages of students were at the *Advanced* level at all three grades. At grade 4, the percentage of students at the *Advanced* level was higher in the Central region than in the West. No other significant differences among regions were seen at any grade at the *Advanced* level.

At all three grades, higher percentages of students in the Northeast and Central regions were at or above the *Proficient* level than in the Southeast. The percentages of students at or above the *Proficient* level in the Northeast and Central regions also appear higher than in the West region at all three grades. However, the apparent differences at grade 12 between these three regions are not statistically significant.

In terms of performance at or above the *Basic* level, results mirror those for the *Proficient* level at grades 4 and 8. The Northeast and Central regions had higher percentages of students at or above *Basic* than did the Southeast and the West. At grade 12, the percentage of students at or above *Basic* was again higher in the Central region than in the Southeast and the West. However, the remaining differences among the regions with respect to percentages at or above the *Basic* level were not statistically significant.

The percentages of students within each achievement level range by region are displayed in Figure 3.4. At grade 4, variability across regions was evident in the percentages in the below *Basic*, *Basic*, and *Proficient* categories. At grade 8, the percentage of students in the *Basic* level ranged from 46 percent (among students in the West) to 49 percent (among students in the Central region). At grade 12, the percentage of students in the *Basic* level ranged from 37 percent (among students in the Southeast) to 41 percent (among students in the Central region).

Table 3.4

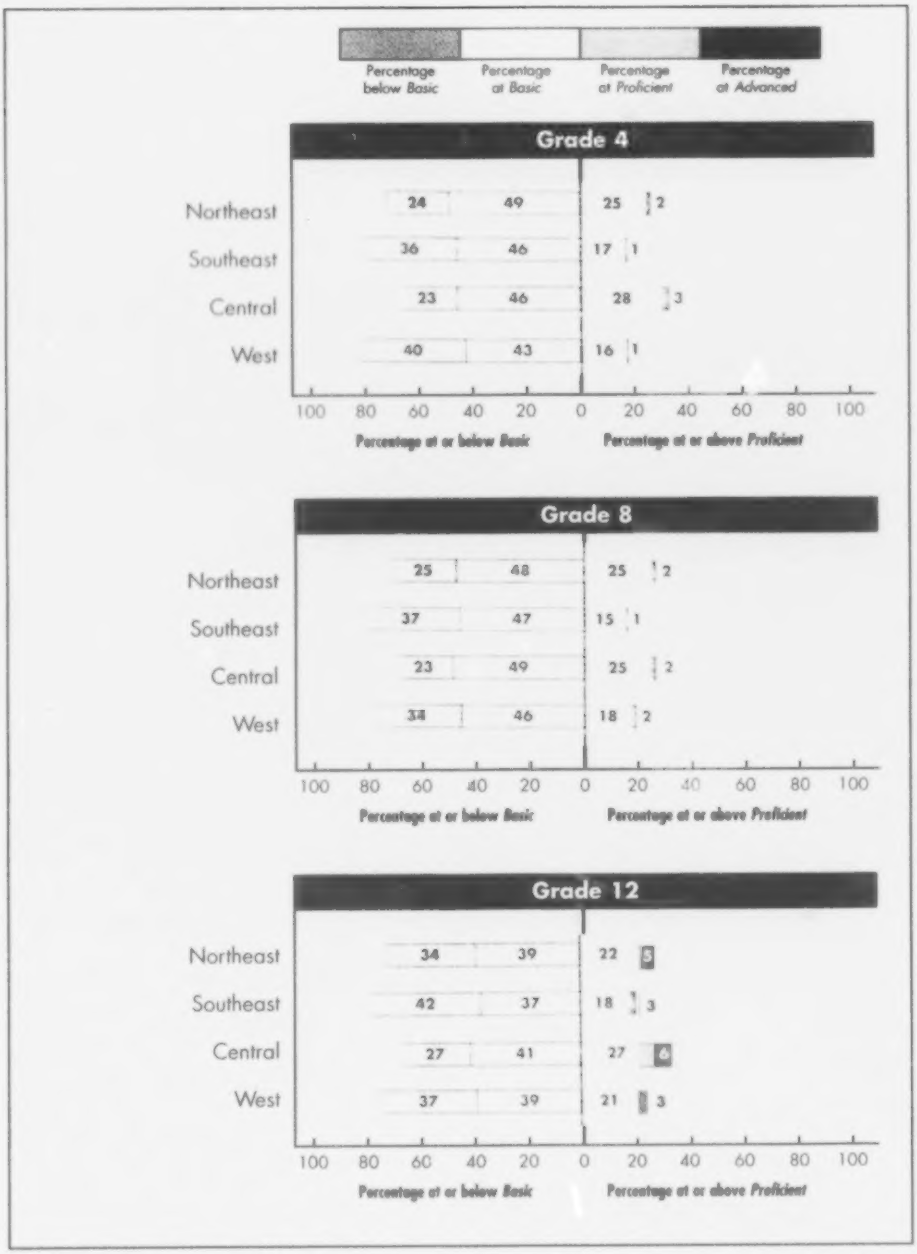
Percentage of students at or above achievement levels in civics by region: 1998

	Below Basic	At or above Basic	At or above Proficient	Advanced
		Grade 4		
Northeast	24	76	27	2
Southeast	36	64	18	1
Central	23	77	31	3
West	40	60	17	1
		Grade 8		
Northeast	25	75	27	2
Southeast	37	63	16	1
Central	23	77	27	2
West	34	66	20	2
		Grade 12		
Northeast	34	66	27	5
Southeast	42	58	21	3
Central	27	73	33	6
West	37	63	24	3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure 3.4

Percentage of students within each achievement level range in civics by region: 1998



NOTE: Percentages may not add to 100, or to the exact percentages at or above achievement levels, due to rounding.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Type of Location

Table 3.5 and Figure 3.5 present achievement level results for all three grades by type of location: central city, urban fringe/large town, and rural/small town. The percentages of students performing at or above the three achievement levels are shown in Table 3.5. Figure 3.5 displays the percentages of students within each achievement level range. (The type of location classifications are described in Appendix A.)

Different patterns of results were seen at each grade level. At grade 12, there were no statistically significant differences among the type-of-location groups at any of the three achievement levels. It is worth noting that five percent of twelfth-grade students in both central city and urban fringe/large town locations reached the *Advanced* level. At grade 8, the percentages of students at or above the *Basic* and *Proficient* levels were higher among students from urban fringe/large town locations than among students from central city or rural/small town locations. At grade 4, the percentage of students at or above the *Proficient* level was higher among urban fringe/large town locations than among the students in central city locations. At or above the *Basic* level, both urban fringe/large town and rural/small town locations had higher percentages of students than did central city locations.

Table 3.5

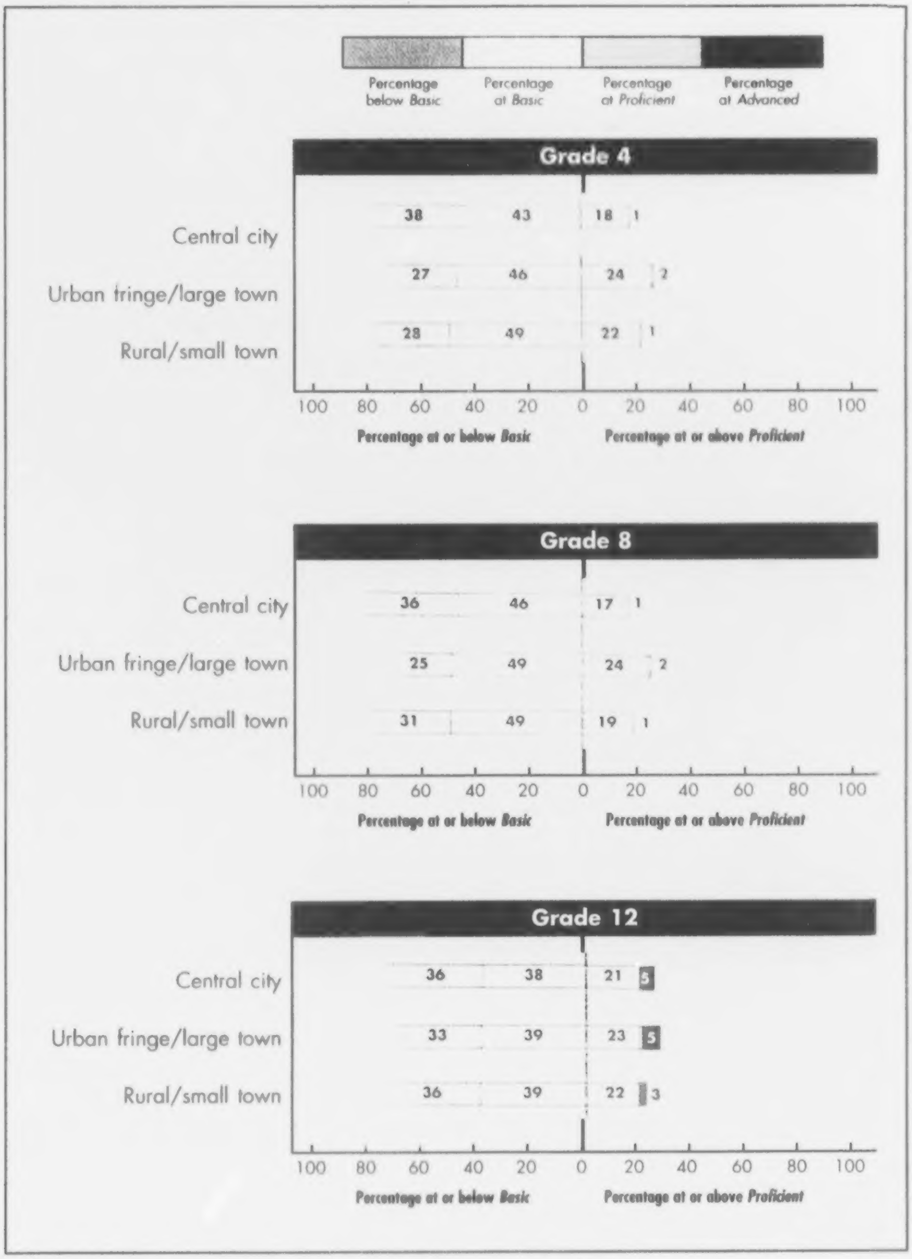
Percentage of students at or above achievement levels in civics by type of location: 1998

	Below *Basic*	At or above *Basic*	At or above *Proficient*	*Advanced*
		Grade 4		
Central city	38	62	19	1
Urban fringe/large town	27	73	26	2
Rural/small town	28	72	23	1
		Grade 8		
Central city	36	64	19	1
Urban fringe/large town	25	75	26	2
Rural/small town	31	69	21	1
		Grade 12		
Central city	36	64	25	5
Urban fringe/large town	33	67	28	5
Rural/small town	36	64	25	3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure 3.5

Percentage of students within each achievement level range in civics by type of location: 1998



NOTE: Percentages may not add to 100, or to the exact percentages at or above achievement levels, due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Eligibility for the Free/Reduced-Price School Lunch Program

Table 3.6 and Figure 3.6 present achievement level results for each grade by students' eligibility for the Free/Reduced-Price School Lunch component of the National School Lunch Program. Eligibility for the Free/Reduced-Price School Lunch program is reported to NAEP by the individual schools. The percentages of students performing at or above the three achievement levels are shown in Table 3.6. Figure 3.6 displays the percentages of students within each achievement level range by eligibility for the Free/Reduced-Price School Lunch Program.

Across the three grades, higher performance was observed for students who were not eligible for the program than for those who were eligible, except for the *Advanced* level at grade 4, where there were too few students to make the comparison. For example, as seen in both Table 3.6 and Figure 3.6, among fourth graders who were eligible for the program in 1998, 49 percent were at or above the *Basic* level, 9 percent were at or above the *Proficient* level, and less than 0.5 percent were at the *Advanced* level. By comparison, the corresponding percentages were 80 percent, 30 percent, and 2 percent for those students not eligible for the Free/Reduced-Price School Lunch Program.

Table 3.6

Percentage of students at or above achievement levels in civics by Free/Reduced-Price School Lunch Program eligibility: 1998

	Below *Basic*	At or above *Basic*	At or above *Proficient*	*Advanced*
Grade 4				
Eligible	51	49	9	▲
Not eligible	20	80	30	2
Information not available *	28	72	27	2
Grade 8				
Eligible	52	48	8	▲
Not eligible	22	78	27	2
Information not available *	24	76	29	3
Grade 12				
Eligible	58	42	10	1
Not eligible	31	69	29	5
Information not available *	32	68	29	5

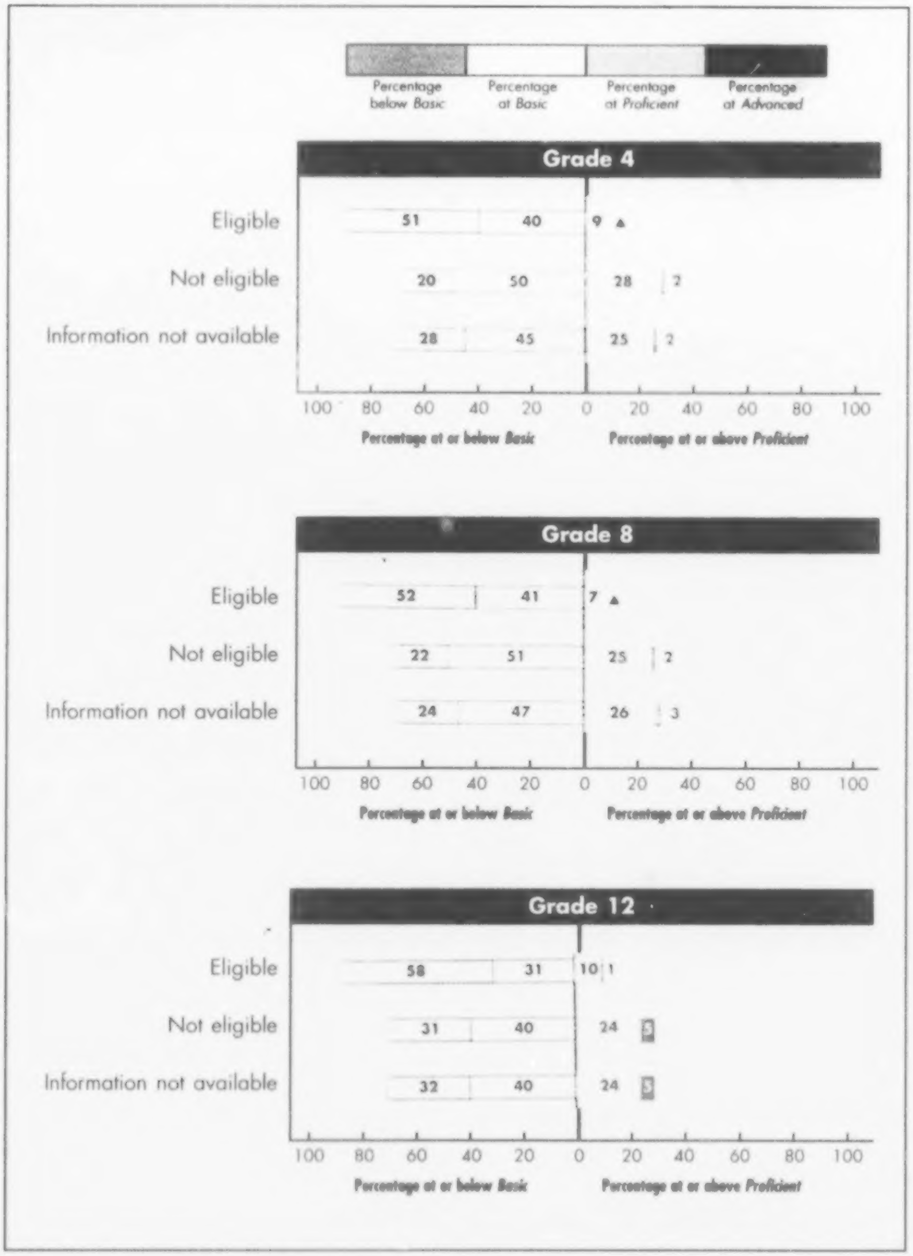
▲ Percentage is between 0.0 and 0.5.

* Performance of students in this category is similar to those in the "Not eligible" category.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure 3.6

Percentage of students within each achievement level range in civics by Free/Reduced-Price School Lunch Program eligibility: 1998



▲ Percentage is between 0.0 and 0.5.

NOTE: Percentages may not add to 100, or to the exact percentages at or above achievement levels, due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Type of School

The percentages of public and nonpublic school students at all three grades who were at or above each of the achievement levels is shown in Table 3.7. Shown in Figure 3.7 are the percentages of students within each achievement level range by type of school.

At all three grades, the percentages of students at or above each of the three achievement levels — at or above *Basic*, at or above *Proficient*, and at *Advanced* — were higher among nonpublic school students than among public school students. There were no significant differences at any of the three grades between Catholic and other nonpublic schools in the percentages at or above each of the three achievement levels. Seven percent of students in nonpublic schools in grade 12 reached the *Advanced* level.

Table 3.7

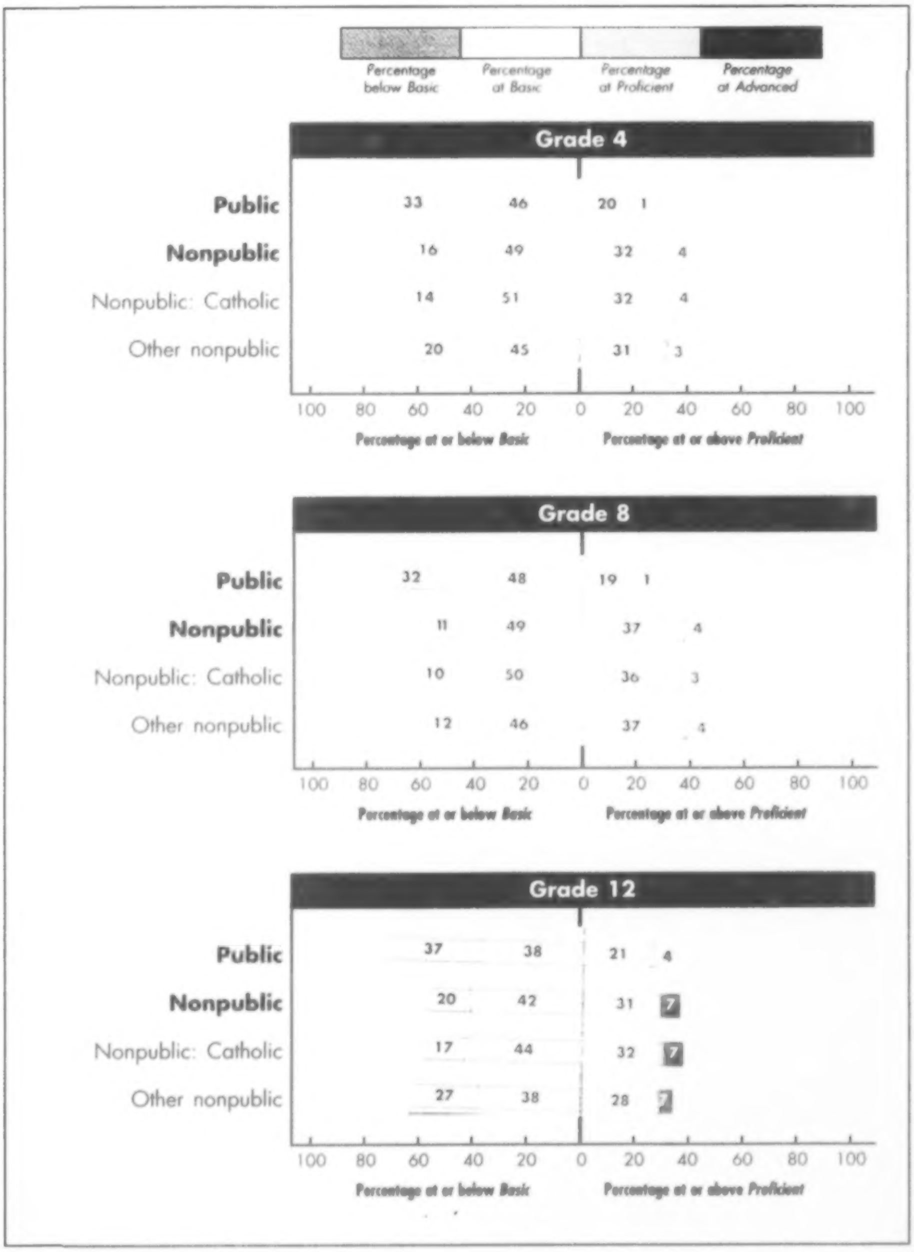
Percentage of students at or above achievement levels in civics by type of school: 1998

	Below *Basic*	At or above *Basic*	At or above *Proficient*	*Advanced*
		Grade 4		
Public	33	67	21	1
Nonpublic	16	84	35	4
Nonpublic: Catholic	14	86	35	4
Other nonpublic	20	80	35	3
		Grade 8		
Public	32	68	20	1
Nonpublic	11	89	40	4
Nonpublic: Catholic	10	90	40	3
Other nonpublic	12	88	42	4
		Grade 12		
Public	37	63	25	4
Nonpublic	20	80	38	7
Nonpublic: Catholic	17	83	39	7
Other nonpublic	27	73	35	7

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure 3.7

Percentage of students within each achievement level range in civics by type of school: 1998



NOTE: Percentages may not add to 100, or to the exact percentages at or above achievement levels, due to rounding.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Summary

This chapter presented achievement level results for selected subgroups of fourth, eighth, and twelfth graders in the 1998 civics assessment. The major findings reported in this chapter are summarized below.

- Some gender differences in civics achievement were found at grades 8 and 12. At both grades, the percentages of students at or above the *Basic* level were higher among females than among males. At grade 12, however, the percentage of students at the *Advanced* level was higher among males than females.

- At all three grades, the percentages of White students at or above the *Proficient* achievement level were higher than those of Black students, Hispanic students, and American Indian students. A higher percentage of White students than Black or Hispanic students reached the *Advanced* level at grade 12. At grade 8, a higher percentage of Asian/Pacific Islander students than Black, Hispanic, or American Indian students were at or above *Proficient* level. A higher percentage of Asian/Pacific Islander students also reached the *Proficient* level at grade 4 than did their Black and Hispanic counterparts.

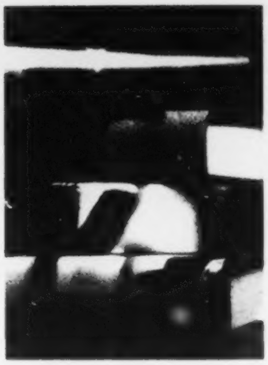
- There is some degree of association between student-reported parental education levels and student achievement at all three grades. At grade 4, the percentages of students at or above the *Proficient* level and at or above the *Basic* level were smaller among students who reported that neither parent graduated from high school than among students whose parents were in the other three parental education groups. At grade 8, the percentages of students whose parents graduated from college that were at the *Advanced* level, and at or above the *Proficient* level, were higher than the comparable percentages for students selecting the other parental education groups. The percentage of eighth-grade students at or above the *Basic* level was highest among students whose parents graduated from college and lowest among students whose parents did not graduate from high school. At grade 12, achievement level results showed a strong association with parental education. Groups with higher parental education levels had higher percentages of students at or above each of the achievement levels.

- Several differences among regions were observed in the 1998 achievement level results. At grade 4, the percentage of students at the *Advanced* level was higher in the Central region than in the West. At all three grades, higher percentages of students in the Northeast and Central regions were at or above the *Proficient* level than in the Southeast. At grades 4 and 8, the Northeast and Central regions had higher percentages of students at or above *Basic* than did the Southeast and West. At grade 12, the percentage of students at or above *Basic* was higher in the Central region than in the Southeast and West.

- At grade 12, there were no statistically significant differences among the type-of-location groups at any of the three achievement levels. Five percent of grade-12 students from central cities and urban fringe/large towns were at the *Advanced* level. At grade 8, the percentages of students at or above the *Basic* and *Proficient* levels were higher among students from urban fringe/large town locations than among students from central city or rural/small town locations. At grade 4, the percentage of students at or above the *Proficient* level was higher among urban fringe/large town locations than among the students in central city locations. At the *Basic* level, both urban fringe/large town and rural/small town locations had higher percentages of students than did central city locations.

- At all three grades, students who were not eligible for the Free/Reduced-Price School Lunch Program had higher levels of achievement than students who were eligible for that program.

- At all three grades, the percentages at or above each of the achievement levels were higher among students attending nonpublic schools than among their peers attending public schools.



CHAPTER 4

Contexts for Learning Civics: School/Teacher Policies and Practices

Overview

As noted in the Introduction, the learning of civics topics in the classroom takes place under such diverse course names as, for example, Civics, American Government, American History, and Social Studies. Civics learning can also take diverse forms both inside and outside the classroom. Many teachers use trips to governmental sites or museums, multimedia presentations, as well as a variety of active teaching strategies (such as group projects, mock trials, writing letters on civic topics, etc.) to enhance civics learning. Students may also learn civics from television, film documentaries, extracurricular books, newspapers and magazines, or their contacts with community organizations. This chapter and the one that follows it examine some of the contexts in which civics learning occurs. This chapter focuses in particular on fourth- and eighth-grade civics teachers, including their educational backgrounds, their perception of their preparation to teach civics, their satisfaction with available instructional resources, and their use of educational technology. As in some other NAEP assessments, parallel information is not available for twelfth grade teachers. These teachers were not administered a background questionnaire because of the difficulty of linking students to teachers in a civics-related class at this grade level.

Who Teaches Civics?

Because civics per se is not a college major, the teachers assigned to civics instruction in the fourth, eighth, and twelfth grades have a wide variety of academic backgrounds. As with other school subjects, there is also wide variation in the teachers' level of academic degree and years of teaching experience. Teachers whose students were sampled for the NAEP civics assessment in grades 4 and 8 were asked to complete a questionnaire about their educational backgrounds, experience, and teaching methods. Because students rarely take courses in civics, the teachers responding to the questionnaire were most likely general teachers at grade 4 and social studies teachers at grade 8. In the NAEP analyses for this report, teacher questionnaire data and student performance data were matched so that the relationship between the two sets of variables could be examined.

BEST COPY AVAILABLE

Table 4.1 begins to answer the question "Who is teaching civics?" by displaying the percentage of students taught by teachers in several college degree categories. In addition, the table displays the mean scale score and the percentage of students at or above the *Proficient* level for each teacher degree category. About half of students at both grades 4 and 8 were taught civics by teachers who have a Bachelor's degree. In the fourth grade, 43 percent of students were taught by teachers who had a Master's degree or higher. In the eighth grade, 46 percent of students were taught by teachers who had a Master's degree or higher. The fourth-grade students taught by Master's-level teachers had higher average scores than fourth-grade students taught by teachers with Bachelor's degrees. For eighth-grade students, there were no significant performance differences in the civics assessment by teacher's level of education.

Table 4.1

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by teacher's highest degree, grades 4 and 8: 1998

What is the highest academic degree you hold?	Grade 4	Grade 8
High School, Associate's Degree, or Vocational Certification		
Percentage of students	▲	▲
Average scale score	***	***
Percentage at or above *Proficient*	***	***
Bachelor's Degree		
Percentage of students	56	54
Average scale score	148	151
Percentage at or above *Proficient*	21	23
Master's Degree		
Percentage of students	38	39
Average scale score	154	152
Percentage at or above *Proficient*	26	23
Education Specialist Degree		
Percentage of students	4	6
Average scale score	154	153
Percentage at or above *Proficient*	27	26
Doctorate or Professional Degree		
Percentage of students	1	1
Average scale score	***	147
Percentage at or above *Proficient*	***	19

▲ Percentage is between 0.0 and 0.5

*** Sample size is insufficient to permit a reliable estimate.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table 4.2 displays the percentage of students by their teachers' undergraduate majors. At grade 4, over three-quarters of students (81 percent) were taught by teachers with education majors, while at grade 8, almost half the students (47 percent) had teachers with history or political science degrees. Fifteen percent of fourth grade and 17 percent of eighth-grade students were taught civics by teachers with other majors, including English or language arts. The remainder of the students were taught civics by teachers with various majors in education. The "education" major was created by aggregating the following undergraduate major/minor options from the teacher questionnaire: elementary education, secondary education, special education, bilingual education/ESL, administration and supervision, curriculum and supervision, and counseling. For both fourth- and eighth-grade samples, the teacher's undergraduate major in college was not associated with student performance on the civics assessment.

Table 4.2

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by teacher's undergraduate major, grades 4 and 8: 1998

What was your undergraduate major?	**Grade 4**	**Grade 8**
History		
Percentage of students	4	42
Average scale score	153	151
Percentage at or above *Proficient*	28	23
Political Science		
Percentage of students	1	5
Average scale score	***	154
Percentage at or above *Proficient*	***	23
Education		
Percentage of students	81	37
Average scale score	151	152
Percentage at or above *Proficient*	23	23
Other		
Percentage of students	15	17
Average scale score	148	152
Percentage at or above *Proficient*	23	24

*** Sample size is insufficient to permit a reliable estimate.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Teacher preparation may also be reflected in the type of teaching certification held by the classroom teacher. Certification ranges from "advanced professional" types to "regular," "temporary," "provisional," and "don't have a certificate in my main assignment field." Table 4.3 shows the percentages of students taught by teachers holding each of the certification types. At both grades 4 and 8, about three-quarters of the students were taught by teachers with regular certificates. Most of the remaining students were taught by teachers with an advanced professional certification. Fourth-grade students whose teachers had either advanced professional or regular teaching certification attained higher civics scores than students whose teachers had certification in the "temporary/provisional" category. In the eighth grade, the small percentage (1 percent) of students taught by teachers in the "other" certification category outscored students whose teachers had advanced professional, regular, or probationary certification. The preponderance of students in that 1-percent-sized category were enrolled in nonpublic schools.

Table 4.3

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by teachers' type of certification, grades 4 and 8: 1998

Type of teaching certification held in main assignment field	Percentage of students	Average scale score	Percentage at or above *Proficient*
		Grade 4	
Advanced professional	15	154	27
Regular	75	151	23
Probationary	4	143	17
Temp/provisional	4	138	11
Other	▲	***	***
Don't have	2	145	19
		Grade 8	
Advanced professional	17	149	19
Regular	74	152	24
Probationary	3	145	17
Temp/provisional	3	152	27
Other	1	168	36
Don't have	2	140	18

▲ Percentage is between 0.0 and 0.5.

*** Sample size is insufficient to permit a reliable estimate.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

The amount of prior teaching experience instructors bring to civics classrooms can be examined in Tables 4.4 and 4.5. Table 4.4 displays years of general teaching experience, while Table 4.5 indicates years of experience specifically teaching civics or government. In the fourth grade, only 11 percent of students were taught civics by teachers with 2 years or less of general teaching experience, while 59 percent of fourth graders were taught by teachers with 11 or more years of experience. A similar pattern is evident in grade 8, where 10 percent of students had teachers in the "2 years or less" experience category, while 58 percent of students had teachers with 11 or more years of general teaching experience. In the fourth grade, students with teachers from the least-experienced category had lower average scale scores than students in all the other teacher-experience categories. In contrast, at grade 8, the students' civics average scale scores did not differ by category of teacher's general experience. The data in Table 4.5 are specific to years of experience in teaching civics or government. While 11 percent or less of students had teachers with less than 2 years of general teaching experience (Table 4.4), higher percentages of students in both grades (39 percent in grade 4 and 49 percent in grade 8) had teachers with 2 years or less experience teaching civics or government. However, in both grades 4 and 8, the students' average scale scores did not differ by the amount of civics teaching experience the teacher brought to the classroom.

Table 4.4

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by years of general teaching experience, grades 4 and 8: 1998

Years of elementary or secondary teaching experience	Percentage of students	Average scale score	Percentage at or above *Proficient*
		Grade 4	
2 years or less	11	139	14
3-5 years	14	149	22
6-10 years	17	152	26
11-24 years	38	152	24
25 years or more	21	154	25
		Grade 8	
2 years or less	10	147	20
3-5 years	14	150	23
6-10 years	18	149	22
11-24 years	35	154	25
25 years or more	23	150	22

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table 4.5

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by years teaching government/civics, grades 4 and 8: 1998

Years of teaching government or civics	Percentage of students	Average scale score	Percentage at or above *Proficient*
	Grade 4		
None	***	***	***
2 years or less	39	148	20
3-5 years	14	154	28
6-10 years	14	155	28
11-24 years	24	153	25
25 or more years	9	154	27
	Grade 8		
None	29	150	22
2 years or less	20	151	23
3-5 years	14	154	27
6-10 years	17	150	23
11-24 years	14	156	27
25 or more years	6	149	22

***Sample size is insufficient to permit a reliable estimate.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Classroom teachers continue to develop their instructional skills by taking additional courses, workshops, and professional development seminars in many topics. The civics teacher questionnaires included a question on the amount of time spent in the past 12 months in professional development seminars in social studies. The results from this question are displayed in Table 4.6. At the fourth grade, 42 percent of the students were taught by teachers who had attended no social studies workshops in the past year. At the eighth grade, 23 percent of students had civics teachers who had not attended a social studies workshop during the past year. The relationship between student performance in civics and the extent of teacher attendance at professional development workshops shows a mixed pattern by grade level. In the fourth grade, students whose teachers were in the "less than 6 hours" of professional development category outscored students whose teachers indicated having taken 16–35 hours of workshops. In the eighth grade, by contrast, the students whose teachers had received 16–35 hours of workshops outscored students whose teachers indicated the "less than 6 hours" category. The amount of civics content in the social studies workshops could have varied widely and is one of a number of factors that may have contributed to the mixed results by grade level.

Table 4.6

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by amount of time teachers reported spending in professional development workshops in social studies during the last twelve months, grades 4 and 8: 1998

Time spent in professional development workshops in social studies in the past twelve months	**Percentage of students**	**Average scale score**	**Percentage at or above *Proficient***
		Grade 4	
None	42	150	23
Less than 6 hours	39	154	26
6-15 hours	11	149	21
16-35 hours	5	141	15
More than 35 hours	3	151	20
		Grade 8	
None	23	150	23
Less than 6 hours	27	148	20
6-15 hours	26	152	23
16-35 hours	12	156	29
More than 35 hours	12	152	27

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

How Well Prepared are Teachers?

The civics teacher questionnaires included a series of questions on how well prepared the teachers felt in various areas related to civics instruction, either through college/university courses or workshops. Teachers could respond that they were well, moderately well, or not well prepared. Table 4.7 presents the results in terms of these response options. In the fourth grade, about half of the students were taught by teachers who considered themselves well prepared in social studies instruction and 60 percent of students were taught by teachers who rated themselves as well prepared in classroom climate and governance. However, less than 10 percent of the students were taught by teachers who felt they were well prepared in using the voluntary national standards for civics or in using computer software for social studies. The fourth-grade students who were taught by teachers who felt themselves well prepared in classroom climate/governance outscored those students whose teachers did not consider themselves well prepared.

Table 4.7

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by teachers' reported preparation, grades 4 and 8: 1998

How well prepared are you in the following?	Grade 4			Grade 8		
	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*
Social studies instruction						
Well prepared	56	152	24	79	151	23
Moderately well prepared	39	149	22	18	151	23
Not well prepared	5	145	18	3	143	20
Using instructional materials in social studies						
Well prepared	43	152	25	53	153	25
Moderately well prepared	48	150	23	42	149	21
Not well prepared	9	147	20	5	148	21
Classroom climate and governance						
Well prepared	60	152	25	75	152	24
Moderately well prepared	34	150	22	22	149	20
Not well prepared	6	144	16	3	145	18
Implementing voluntary national standards for civics						
Well prepared	5	157	31	11	152	25
Moderately well prepared	23	149	22	38	150	22
Not well prepared	72	151	23	51	151	23
Using software for social studies						
Well prepared	6	151	26	13	153	24
Moderately well prepared	29	152	24	41	150	22
Not well prepared	65	150	23	47	151	24

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

In the eighth-grade sample, at least three-quarters of the students were taught by teachers who considered themselves well prepared in social studies instruction and classroom climate/governance. Similar to the fourth-grade pattern, low percentages of students were taught by teachers who felt they were well prepared in implementing the national standards for civics (11 percent) or in using computer software for social studies (13 percent). About half of the eighth-grade students had teachers who felt well prepared in using instructional materials in social studies. Those students outscored students whose teachers felt themselves not well prepared in using instructional materials.

The results of additional teacher self-preparedness questions are presented in Table 4.8. More than four out of five students at both grades 4 and 8 were taught by teachers who felt themselves well prepared in classroom management and organization. At both the fourth and eighth-grade levels, the students who had these teachers outperformed students on the civics assessment whose teachers were in the "moderately well-prepared" category. About half of the students at both the fourth and eighth grades were taught by teachers who felt themselves well prepared in techniques of cooperative group instruction.

Approximately one in four students (from 16 to 28 percent) across grades 4 and 8 were taught by teachers who considered themselves well prepared in either the use of telecommunications or the use of computers. The eighth-grade students whose teachers considered themselves moderately well prepared in the use of telecommunications had higher civics assessment scale scores than those students whose teachers did not feel well prepared in this area. There is some disjunction between the percentages of students whose teachers felt well prepared in using computers in general (26–28 percent in Table 4.8) and the even lower percentages (6–13 percent in Table 4.7) whose teachers felt well prepared in using software for social studies.

Table 4.8

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by teachers' reported preparedness to fulfill certain teaching-related tasks, grades 4 and 8: 1998

How well prepared are you in the following?	Grade 4			Grade 8		
	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*
Use of telecommunications						
Well prepared	16	151	24	23	151	22
Moderately well prepared	48	151	23	50	153	25
Not well prepared	36	150	23	27	148	21
Use of computers						
Well prepared	26	151	24	28	151	23
Moderately well prepared	60	150	23	57	152	23
Not well prepared	14	150	22	16	149	23
Cooperative group instruction						
Well prepared	59	152	24	53	152	25
Moderately well prepared	39	149	22	42	149	21
Not well prepared	2	150	21	5	155	26
Classroom management and organization						
Well prepared	84	151	24	86	152	24
Moderately well prepared	16	146	18	13	145	19
Not well prepared	▲	***	***	1	155	21

▲ Percentage is between 0.0 and 0.5.

***Sample size is insufficient to permit a reliable estimate.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

BEST COPY AVAILABLE

How Much Class Time is Given to Civics?

Teachers at both fourth and eighth grades were asked to indicate the length of class time per day they typically spent on social studies instruction. Table 4.9 displays the results for the four options: less than 30 minutes; 30–44 minutes; 45–60 minutes; and greater than 60 minutes. At the fourth grade, 63 percent of students received instruction in the 30–44 minute range. At the eighth grade, the 30–44 minute category also appeared to be the largest (48 percent), but the 45–60 minute category was nearly as large (41 percent). Class time length was significantly related to civics scale score performance only in the fourth grade, where the students in both the 30–44 minute and 45–60 minute class times outscored their peers in the "less than 30 minutes" category.

Table 4.9

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by class time per day spent on social studies instruction, grades 4 and 8: 1998

How much time do you spend with this class for social studies instruction on a typical day?	Grade 4	Grade 8
Less than 30 minutes		
Percentage of students	14	3
Average scale score	142	139
Percentage at or above *Proficient*	15	19
30-44 minutes		
Percentage of students	63	48
Average scale score	153	153
Percentage at or above *Proficient*	25	24
45-60 minutes		
Percentage of students	22	41
Average scale score	151	151
Percentage at or above *Proficient*	24	23
Greater than 60 minutes		
Percentage of students	1	8
Average scale score	***	150
Percentage at or above *Proficient*	***	23

***Sample size is insufficient to permit a reliable estimate.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Do Teachers Believe They Have Adequate Resources?

Teachers responded to the question "Which of the following statements is true about how well your school system provides you with the instructional materials and other resources you need to teach your class?" Table 4.10 displays the pattern of results. For both grades 4 and 8, 52 percent of the students were taught by teachers who indicated they received most of the resources they needed. Almost a third of the students in both grades had teachers who said they only receive "some" of the resources they need. One percent of the students in either grade had teachers who said they received "none" of the resources they needed. In terms of student performance, in the eighth grade, students whose teachers received "most" and "all" of the resources they needed attained significantly higher civics scale scores than students in the "some" resources category. In the fourth grade, the pattern of results was similar, but the differences did not reach statistical significance.

Table 4.10

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by teachers' reports on the availability of resources, grades 4 and 8: 1998

Which is true about how well your school system provides you with the instructional materials and other resources you need to teach your class?	Grade 4	Grade 8
All		
Percentage of students	17	16
Average scale score	153	155
Percentage at or above *Proficient*	24	28
Most		
Percentage of students	52	52
Average scale score	151	153
Percentage at or above *Proficient*	23	24
Some		
Percentage of students	31	32
Average scale score	148	147
Percentage at or above *Proficient*	22	20
None		
Percentage of students	1	1
Average scale score	***	***
Percentage at or above *Proficient*	***	***

***Sample size is insufficient to permit a reliable estimate.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

What is the Pattern of Technology Usage to Enhance Instruction?

Effective implementation of technology to enhance instruction is a complex activity for today's schools. It requires resource-intensive activity across at least three dimensions: availability of appropriate, accessible electronic equipment; teacher preparation and training, and availability of appropriate software and Internet access. Evaluation of each of these dimensions can be approached from the points of view of the school administration, the teachers, and the students. The questionnaire data available from NAEP can begin to sketch out a pattern of the use of technology in education across the nation, but the sketch should be interpreted with caution because of the limited nature of the information. Table 4.11 addresses the first dimension, the availability of computers as reported by school officials. The three questions displayed with "yes" or "no" answers in Table 4.11 were not mutually exclusive. It was possible, therefore, for a school to have answered "yes" both to "are computers available in all classrooms?" and to "are computers available in a separate computer lab available to classes?" Computer availability in all classrooms appeared more frequent in grade 4 (79 percent) than in grades 8 (45 percent) or 12 (24 percent).

Across the three grades, 36 to 41 percent of students were in schools that answered "yes" to whether computers were available to bring to classrooms when needed. In both grades 8 and 12, students whose schools answered "yes" to this question outscored students whose schools answered "no."

Table 4.11

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by availability of computers, grades 4, 8 and 12: 1998

Are computers available to students in your classes in any of the following ways?	YES			NO		
	Percentage of students	**Average scale score**	**Percentage at or above *Proficient***	**Percentage of students**	**Average scale score**	**Percentage at or above *Proficient***
Grade 4						
Available in all classrooms	79	150	23	21	149	20
Grouped in a separate computer lab available to classes	80	151	23	20	149	22
Available to bring to classrooms when needed	36	152	25	64	149	22
Grade 8						
Available in all classrooms	45	151	23	55	150	22
Grouped in a separate computer lab available to classes	89	151	23	11	146	18
Available to bring to classrooms when needed	40	153	24	60	149	21
Grade 12						
Available in all classrooms	24	151	29	76	150	26
Grouped in a separate computer lab available to classes	94	150	26	6	149	27
Available to bring to classrooms when needed	41	153	29	59	148	25

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

The second dimension, level of teacher preparation to use technology, has been touched upon in the previous sections of this chapter. In Table 4.8, it can be seen that most students at both the fourth- and eighth-grade levels had teachers who saw themselves as at least moderately well prepared to use both telecommunications and computers. Sixty-four percent of fourth graders and 73 percent of eighth graders were taught by teachers who felt themselves well to moderately well prepared to use telecommunications. Even higher percentages of students (86 percent in the fourth grade and 85 percent in the eighth grade) had teachers who saw themselves as well to moderately well prepared to use computers. However, this level of perceived confidence in preparation did not extend to the use of software for social studies classes. In Table 4.7 it can be seen that only 35 percent of fourth graders and 54 percent of eighth graders were taught by teachers who felt themselves at least moderately well to well prepared to use social studies software. The cause of this discrepancy for teachers between perceived preparedness with computers in general and yet less preparedness with using social studies software is not available in the questionnaire data. Some hypotheses might include possibly poor availability/quality of existing social studies software, lack of time for teachers to review existing software, or lack of time to learn and experiment with such software.

The third dimension, the frequency of use of computers, software, and the Internet by teachers in the classroom, is addressed in Table 4.12. At grade 4, 57 percent of students were taught by teachers who indicated that computers were available in the social studies classroom. In grade 8, the largest numbers of students had computer access only through laboratories or libraries. In both grades, students who had laboratory access to computers had higher mean scale scores than students whose teachers indicated that computer access was "not available." Teachers' self-perception of their own rather weak preparedness to use social studies instructional software was also exhibited in the frequency with which they use computer software in social studies class. As can be seen in Table 4.12, 67 percent of fourth graders and 63 percent of eighth graders were in classes where the teacher indicated "never or hardly ever" using computer software in class. Fourth-grade students whose teachers indicated that they used computer software once to twice a month had higher average scale scores than students in the "never/hardly ever" category.

In recognition of the burgeoning importance of the Internet, teachers were asked about degree of Internet use. Almost three-quarters (73 percent) of fourth graders were in classes where teachers indicated that as part of social studies instruction they never or hardly ever had students access information through the Internet for use in the classroom. Internet usage appeared more common in the eighth grade, where 55 percent of students were in classes that never or hardly ever used it, while 35 percent used it once or twice a month. In both the fourth and eighth grades, students whose teachers had them access information through the Internet once or twice a month had higher scores than students whose teachers never had them use the Internet.

Table 4.12

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by use of computers and the Internet for social studies instruction, as reported by teachers, grades 4 and 8: 1998

	Grade 4			Grade 8		
	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*
Availability of computers in social studies class						
Not available	13	145	18	13	142	17
Lab/library but difficult to access	18	156	27	45	152	24
Readily accessed in lab/library	12	152	25	28	153	25
Available in the classroom	57	149	22	14	150	22
Use computer software						
Every day	▲	***	***	2	159	30
Once or twice a week	9	150	23	8	153	27
Once or twice a month	23	156	28	27	152	23
Never or hardly ever	67	149	22	63	150	23
Access to information through Internet in the classroom						
Every day	1	***	***	1	***	***
Once or twice a week	7	158	33	10	155	25
Once or twice a month	19	159	30	35	156	26
Never or hardly ever	73	148	21	55	148	21

▲ Percentage is between 0.0 and 0.5.

***Sample size is insufficient to permit a reliable estimate.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Summary

This chapter examined primarily teacher-related variables to set a context for the learning of civics. The key findings about the demographic profile of teachers of students in fourth- and eighth-grade social studies classes include:

- About half of students at both grades 4 and 8 were taught civics by teachers with a Bachelor's degree. Forty-three percent of fourth graders and 46 percent of eighth graders were taught by teachers who had Master's or higher degrees. The fourth-grade students taught by Master's level teachers had higher scores than fourth-grade students taught by teachers with Bachelor's degrees.
- For both fourth- and eighth-grade student samples, the teacher's undergraduate major in college made no statistically significant difference in student performance on the civics assessment.
- Fourth-grade students whose teachers had either advanced professional or regular teaching certification produced higher civics scores than students whose teachers had certification in the "temporary/provisional" category.
- Most students at both fourth and eighth grades generally had been taught by experienced social studies teachers. Only 11 percent of students at grade 4 and 10 percent at grade 8 had teachers with 2 years or less of experience. In the fourth grade only, students with teachers from the least experienced category were outscored in the civics assessment by students in all the other teacher-experience categories.
- Students at both fourth and eighth grades had teachers who rated themselves as well prepared in social studies instruction, classroom climate/governance, classroom management, and the use of computers. However, teachers in both grades generally rated themselves as much less well prepared in using the voluntary national standards for civics/government or in using computer software for social studies instruction.
- Teachers of about half of the students in both grades said that they received "most" of the resources they needed, while teachers of only 1 percent of students said that they received "none" of the resources they need.

- Across all three grades, 36 to 41 percent of students were in schools that answered "yes" to whether computers were available to bring to classrooms when needed. In both grades 8 and 12, students whose schools had computers available outscored students whose schools did not have computers available.

- Sixty-seven percent of fourth graders and 63 percent of eighth graders were in classes where the teacher indicated "never or hardly ever" using computer software in class. Fourth-grade students whose teachers indicated that they used computer software once or twice a month had higher mean scale scores than students in the "never/hardly ever" category.

- Almost three-quarters (73 percent) of fourth graders were in classes where teachers indicated "never or hardly ever" having students access the Internet for social studies. Internet usage appeared more common in the eighth grade, where 55 percent of students were in classes that "never or hardly ever" used it, while 35 percent used it once or twice a month. In both the fourth and eighth grades, moderate frequency of Internet usage (once or twice a month) was associated with higher mean scale scores than the groups of students who had no Internet usage.

CHAPTER 5

Contexts for Learning Civics: Classroom Practices and Student Variables

Overview

While the previous chapter focused on teachers, this chapter focuses on classroom activities and other contexts for learning civics topics. With the development of professional standards for teaching in various subjects and the implementation of the Goals 2000: Educate America Act[1] in the early 1990's, policymakers, educators, researchers and the public have become increasingly interested in the type and quality of instruction in the nation's elementary and secondary schools. Of particular interest is the relationship between various classroom instructional practices and student learning. The NAEP data can begin to shed light on these issues. The complex interactions among teacher qualities, student ability levels, and patterns of implementation of instructional techniques are beyond the scope of this report card, but have been approached in other studies.[2]

The NAEP questionnaires administered to students and teachers provided the data for the analyses in this chapter. Although the analyses presented in this chapter can begin to address the nature of the relationship between teachers' use of various instructional techniques and the civics scale scores of their students, such analyses provide only one perspective on this multidimensional question. Many additional studies would be needed to provide a more complete picture of the dynamics of elementary and secondary instruction in civics.

---

[1] Executive Office of the President. (1990). *National goals for education.* Washington, D.C.: U.S. Government Printing Office. Goals 2000: Educate America Act, H.R. 1804, 103d Cong., 2nd Sess. (1994).

[2] Henke, R. R., Chen, X., & Goldman, G. (1999). *What happens in classrooms? Instructional practices in elementary and secondary schools, 1994-95.* (NCES Publication No. 1999-348). Washington, DC: National Center for Education Statistics.

BEST COPY AVAILABLE

What Civics Topics do Students Study?

Chapter 1 enumerated the range of topics from the civics framework that guided the development of the civics assessment. Do students encounter these topics in their social studies classes? The opportunity for school exposure to the topics found in the 1998 civics framework is important for good performance on the assessment. Table 5.1 presents the results for grade 4 for the question "During this school year, have you studied any of the following topics?" Topics studied by at least half the students included the student's community, the President and leaders of the country, rules and laws of government, and rights and responsibilities of citizens. It should be noted that these percentage results may be somewhat understated because of two factors: first, students may have encountered these topics in the first, second, or third grades and yet (accurately) answered "no" to the question. Second, fairly large percentages of fourth graders (17 to 32 percent) chose the "I don't know" option for these topics. Students who answered "yes" on the studied "your community" topic had higher average civics scale scores than did the students who answered "no." In several topic areas in Table 5.1, grade-4 students who answered "no" to studying a topic in grade 4 had higher scores than students who answered "yes." These counterintuitive results may stem either from students' failure to understand the reporting categories or from their using knowledge they gained in earlier grades.

Table 5.1

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by type of content studied this year as reported by students, grade 4: 1998

During this school year, have you studied any of the following topics?	Yes			No			I don't know		
	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*
How our government works	43	159	30	25	159	28	32	133	9
Rules/laws of government	55	152	23	28	156	28	17	139	17
Elections and voting	46	151	23	36	157	28	18	138	15
The President/ leaders of country	58	154	25	24	155	26	18	135	12
Your community	64	155	26	19	151	25	17	135	12
Rights and responsibilities of citizens	50	155	26	28	154	25	22	138	14
How people solve disagreements	43	154	25	31	158	27	26	139	15

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

More detailed questions on topics studied were asked of the eighth and twelfth graders. These are displayed in Table 5.2. Students in these grades generally indicated a high percentage of classroom coverage of the civics topics in the framework. Over 70 percent of students at both grades 8 and 12 indicated that they had studied the U.S. Constitution and Congress in the current school year. Note that the same caution raised for the fourth-grade data applies to this question for grades 8 and 12 — students could have accurately answered "no" to the topics on the list because they studied them in grades other than their current year. In fact, on many of the topics, the twelfth graders who answered "no" had higher average civics scale scores than students who answered "yes." This seemingly curious result may have its roots in the fact that the students had indeed covered the topics — but not in the current grade. However, more research is needed to examine this speculation.

While about two-thirds or more of the eighth graders and twelfth graders indicated studying the first seven topics (with the exception of the President and cabinet) listed in Table 5.2, considerably lower percentages (generally less than half) indicated that they had studied other countries' governments or international organizations such as the UN.

Table 5.2

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by type of content studied this year as reported by students, grades 8 and 12: 1998

	GRADE 8						GRADE 12					
	Yes			No			Yes			No		
This year studied	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*
U.S. Constitution	79	152	23	14	152	25	71	151	26	27	154	28
Congress	75	152	23	17	151	24	71	151	26	27	154	29
President and cabinet	55	156	26	32	149	21	63	152	28	32	152	27
How laws are made	67	151	23	24	155	26	64	150	26	32	155	30
The court systems	60	152	23	30	153	25	64	150	26	32	155	30
State and local government	67	151	22	22	155	28	69	150	25	28	156	32
Political parties, elections, voting	69	152	23	22	153	25	70	150	26	27	155	29
Other countries' government	40	146	19	45	158	29	48	150	26	44	155	29
International organizations	33	146	18	43	160	32	45	150	26	45	155	31

NOTE: A small percentage of students responded "I don't know" to each of the topics.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

What Instructional Techniques do Civics Teachers Use?

Civics teachers' responses to questions about the frequency with which they use each of a selection of instructional activities were matched to their students' civics assessment results for this analysis. The percentages of fourth-grade students receiving each instructional activity by "frequency of exposure" category are displayed in Table 5.3. Parallel data for grade 8 are displayed in Table 5.4.

Typical instructional activities

A snapshot of what students encounter on a weekly basis in the nation's social studies classes can be developed by combining the data in the first two frequency categories —"Every day" and "Once or twice a week." Using this convention, it can be seen that, for grade 4, the greatest percentages of students encountered the following instructional activities on a weekly basis: using the social studies textbook (83 percent); using quantitative data, charts, or graphs (81 percent); completing worksheets (68 percent); hearing a teacher's lecture (66 percent), and using books, newspapers or magazines (58 percent). Ten percent or less of students in grade 4 encountered the following instructional activities on a weekly basis: using computer software; writing a report of three or more pages; participating in debates or mock trials; or writing letters on civics topics.

In Table 5.4, the pattern of frequency of use of instructional activities for grade 8 is much the same as it was for grade 4. The largest percentages of eighth graders also encountered the following instructional activities, at least on a weekly basis: using the social studies textbook (95 percent); using quantitative data, charts or graphs (77 percent); completing worksheets (76 percent); hearing a teacher's lecture (77 percent); and, using books, newspapers or magazines (55 percent).

In general, for the grade-8 students, the instructional activities encountered with low frequency on a weekly basis were similar to the pattern for grade-4 students: using computer software; writing a report of three or more pages; participating in debates or mock trials; and writing letters on civics topics were all encountered by 12 percent or less of the students.

Table 5.3

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by frequency of selected instructional activities as reported by teachers, grade 4: 1998

	Frequency of instructional activity											
	Every day			**Once or twice a week**			**Once or twice a month**			**Never or hardly ever**		
In grade 4, how often do you . . .	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*
Use a social studies textbook?	56	152	24	27	150	22	9	145	24	7	151	24
Use books, newspapers, magazines?	8	149	23	50	152	25	35	151	22	6	143	18
Use primary documents?	1	140	17	12	144	19	33	153	24	54	151	24
Use quantitative data, charts, or graphs?	26	151	24	55	152	24	18	148	21	1	135	8
Use computer software?	1	***	***	9	150	23	23	156	28	67	149	22
Use films, videos, filmstrips?	▲	***	***	13	154	25	65	150	23	22	149	22
Have students complete a worksheet?	7	154	25	61	151	23	23	151	25	8	149	23
Give a lecture?	20	152	23	46	150	23	19	152	25	15	150	23
Have students do a group activity/project?	5	155	26	30	151	24	53	151	23	12	150	23
Have students write a three or more page report?	▲	***	***	2	139	17	20	148	21	79	152	24
Have students participate in debates?	1	***	***	4	145	14	27	150	23	69	152	24
Have students participate in mock trials?	▲	***	***	3	143	19	30	151	24	67	151	23
Have students write letters?	▲	***	***	3	140	17	27	149	21	70	152	25

▲ Percentage is between 0.0 and 0.5.

***Sample is insufficient to permit a reliable estimate.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table 5.4

Percentage of students, average civics scales scores, and percentage at or above *Proficient* by frequency of selected instructional activities as reported by teachers, grade 8: 1998

	Frequency of instructional activity											
	Every day			Once or twice a week			Once or twice a month			Never or hardly ever		
In grade 8, how often do you . . .	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*	Percentage of students	Average scale score	Percentage at or above *Proficient*
Use a social studies textbook?	66	151	23	29	152	24	3	150	24	2	140	17
Use books, newspapers, magazines?	7	152	24	48	153	25	38	151	22	8	143	18
Use primary documents?	3	161	36	26	153	25	52	151	23	20	147	21
Use quantitative data, charts, or graphs?	21	152	22	56	151	24	22	150	22	1	142	21
Use computer software?	2	159	30	8	153	27	27	152	23	63	150	23
Use films, videos, filmstrips?	1	145	19	21	155	26	67	152	24	11	141	17
Have students complete a worksheet?	11	150	24	65	152	23	19	152	24	5	147	22
Give a lecture?	26	151	24	51	153	25	15	147	20	8	148	19
Have students do a group activity/project?	5	154	29	38	153	25	52	151	22	5	142	17
Have students write a three or more page report?	▲	***	***	3	158	31	47	153	24	51	149	22
Have students participate in debates?	2	154	30	10	153	26	44	154	26	44	147	20
Have students participate in mock trials?	1	***	***	5	157	30	43	154	25	51	148	21
Have students write letters?	▲	***	***	4	146	17	28	152	24	68	151	24

▲ Percentage is between 0.0 and 0.5.

***Sample is insufficient to permit a reliable estimate.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Group work, computer software, and film/video/filmstrips

Matching students' assessment results with the frequency of each instructional activity type allows for some estimate of the relationship between learning and various modes of instruction. Since many other variables (such as student ability grouping, teacher effectiveness, socioeconomic status, etc.) also affect instructional effectiveness, readers are cautioned not to attribute direct causality to the relationships described here. While most of the thirteen instructional activities shown in Tables 5.3 and 5.4 did not reach statistically significant relationships with student performance, a few did. For the most part, these statistically significant instructional activities were employed in the classroom setting with medium frequency (once to twice per week/month) compared with the other activities.

It has been reported in a separate survey that social studies teachers seem less likely than teachers in other core academic subjects — English, mathematics, and science — to use alternatives to whole-class instruction.[3] In other words, social studies teachers were less likely than mathematics teachers and science teachers to work with small groups. The data in tables 5.3 and 5.4 tend to support this finding. Only 35 percent of students in the fourth grade and 43 percent in the eighth grade received group activities or projects on at least a weekly basis. However, in both grades, small group activities were employed more commonly (43 percent in fourth grade and 52 percent in eighth grade) once- or twice-a-month — and the assessment results in grade 8 indicated that students in this frequency category had higher average civics scale scores than students whose teachers reported that they "Never or hardly ever" used small-group activity.

In grade 4, both the occasional use of computer software and the use of quantitative data, charts, and graphs with any frequency in class were associated with higher scores on the civics assessment than for the groups that "never or hardly ever" used these instructional activities. In grade 8, the moderate (once to twice per week/month) use of films, videos, and filmstrips in class was associated with higher assessment scores.

---

[3] *Ibid.*

What are the Differences in Instructional Patterns Between Experienced and Less Experienced Teachers?

The craft of effective teaching is developed over time as newer teachers try various instructional approaches with their various class levels. The NAEP teacher questionnaires address questions of the frequency of use of instructional activities, but they cannot capture other significant characteristics of teachers' instructional techniques. While two teachers, for example, may use the same technology or materials with the same frequency to teach a given concept, one teacher may explain the concept differently or more effectively than the other. Further, as teachers grow in experience, they may be better able to choose the instructional activity that best fits a given educational goal. The National Board for Professional Teaching Standards (NBPTS) recommends that teachers be well grounded in the relative advantages and disadvantages of a large body of instructional activities and choose the most appropriate teaching strategies for a given lesson based on learning objectives, their students' current level of knowledge, and available time and resources.[4]

Because the NAEP survey asked teachers to categorize their years of experience, their students' performance can be examined by the interaction between teacher experience and type of instructional activity. Data were grouped for "less experienced" (2 years or less) and "experienced" (3 years or more) teachers. Table 5.5 displays the extent and pattern of significant differences found in favor of the experienced teachers for grade 4. Results are presented only where significant differences between less experienced and inexperienced teachers were observed. Each checkmark (✓) in the table indicates an analysis result in which either the percentage of students or the average scale score of students taught by experienced teachers was significantly greater than that of students taught by less-experienced teachers. The first row of the table (Social Studies Textbook), for example, shows that there were significant differences in three categories of teachers' responses regarding frequency-of-use of a social studies textbook: the "Every day" category, the "Once or twice a week" category, and the "Once or twice a month" category. Within each category, the data and notation in the scale score column indicate that students of less experienced teachers were outperformed by students of more experienced teachers. Note that very few of the instructional activity categories differed in the frequency of instructional activity (percentage of students column). In fact, the experienced teachers tended to have greater percentages of students taught in the "once or twice a month" or the "never or hardly ever" category for the

---

[4] National Board for Professional Teaching Standards. (1989). *What teachers should know and be able to do.* Detroit, MI: Author.

National Board for Professional Teaching Standards. (1994). *Early adolescence/generalist standards for national board certification.* Detroit, MI: Author

Table 5.5

Summary of paired percentages of students and paired scale score means with significant differences between less experienced (two years or less) and experienced (three years or more) teachers by selected types of instructional activities, grade 4: 1998

How often do you use the following resources to teach social studies in this class?	Frequency of instructional activity: Every day		Once or twice a week		Once or twice a month		Never or hardly ever	
	Percentage of students	Average scale score	Percentage of students	Average scale score	Percentage of students	Average scale score	Percentage of students	Average scale score
Social studies textbook		✓ 144–153		✓ 141–151		✓ 131–152		
Books, newspapers, magazines				✓ 148–155		✓ 143–152		✓ 138–157
Primary documents				✓ 133–147		✓ 144–154		✓ 141–153
Quantitative data, charts, or graphs		✓ 142–153		✓ 145–153		✓ 144–155		
Computer software					✓ 12-25			✓ 146–153
Films, videos, filmstrips			✓ 8–16			✓ 139–152		
Have students complete a worksheet				✓ 143–151		✓ 142–154		✓ 130–154
Give a lecture		✓ 142–155		✓ 140–152			✓ 5–16	
Have students do a group activity/project				✓ 140–154		✓ 143–151		✓ 138–153
Have students write a three or more page report								✓ 150–156
Have students participate in debates						✓ 144–152	✓ 57–70	✓ 141–153
Have students participate in mock trials						✓ 145–153		✓ 148–155
Have students write letters						✓ 145–152		✓ 150–156

✓ Indicates a significant difference in favor of experienced teachers.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

BEST COPY AVAILABLE

instructional activities listed. In fact, for 9 out of 13 institutional activities, the students of experienced teachers who never used the activity outperformed the students of less experienced teachers who never used the activity. This finding is somewhat similar to the results of the NCES 1994-95 teacher follow-up survey which found that more experienced teachers were less likely than less experienced teachers to use some recommended teaching practices and more likely to use some traditional practices.[5]

In grade 4, the groups of students taught by teachers with three or more years of experience had higher civics scores than students taught by teachers with two years or less experience in every one of the instructional activities categories. As suggested earlier in this section, the difference between experienced and less experienced teachers in terms of student assessment performance appears to lie less in the choice of type or frequency of instructional activity than in what the teacher does within the activity.

The relationships among teachers' experience, frequency/type of instructional activity, and student performances are complex and not easily predicted. Grade level also emerged as a factor in these relationships. Despite the large number of differences in performance for fourth-grade students by teacher experience and instructional type, very few comparable differences emerged in the data for grade 8 (data not displayed). As noted in the previous chapter, years of teacher experience was not significantly related to overall eighth-grade student performance on the civics assessment.

Teacher professional development workshops

Teachers may continue to learn about instructional activities that may be effective in their classrooms by attending professional development workshops or college courses. The teachers in grades 4 and 8 were asked the question, "*In the past twelve months, how many hours in total have you spent in professional development workshops or seminars in social studies or the teaching of social studies? Include attendance at professional meetings and conferences, district-sponsored or external workshops, and college or university courses.*" In grade 4, 58 percent of students were taught by teachers who had attended professional development activities in the past year. At grade 8, the parallel figure was 65 percent of the students. For purposes of this analysis, teacher responses were collapsed into those who checked "none" versus those who checked any of the other categories. This collapsed variable was then cross-tabulated with the instructional activities variables to shed some light on the pattern of possible differences in the classroom environment for teachers who attended professional development workshops or courses versus those who did not.

---

[5] Henke, R. R., Chen, X., & Goldman, G. (1999). *What happens in classrooms? Instructional practices in elementary and secondary schools, 1994-95.* (NCES Publication No. 1999-348). Washington, DC: National Center for Education Statistics.

Table 5.6 presents the results of these comparisons. Each check mark in the table represents a significant difference in the percentage of students receiving the indicated instructional activity based on whether their teachers had attended professional development. In reading Table 5.6, note that in the "used more" column, the higher percentage of students represents the workshop-attending teachers, while in the "used less" column the lower percentage of students represents the workshop-attending teachers. Some general patterns emerged from the data. For example, eighth-grade teachers who attended workshops used textbooks less and taught greater percentages of students using more extended reports, debates, and mock trials. Fourth-grade teachers who attended workshops taught fewer students using worksheets and more students using group activities and the "active" instructional techniques of debates, mock trials, and letter writing, as well as external resources such as books, newspapers, and magazines. In addition, at both grades, teachers who attended professional development workshops taught more students using computer software than teachers who did not attend professional development workshops. The reader should keep in mind the results from the previous sections, which indicated that very low percentages of students were taught with the group-centered and student-active instructional activities. The results presented in this section indicate that 1) relatively low percentages of students encountered these instructional activities; and 2) teachers who attended professional development activities teach greater percentages of students using student-active teaching then teachers who had not attended professional development activities.

Out-of-School Contexts

Home support for learning is as important in social studies and civics as it is for other subjects surveyed in NAEP assessments. Variables related to the students' home and community environments often show a strong relationship to performance. Such relationships were found in the 1998 NAEP assessments in reading and writing.[6] The following section examines some of these variables and their relation to NAEP civics scores.

Discussion of schoolwork at home

The extent to which schoolwork is discussed within the home is one indication of its priority for students and their families. When students discuss their schoolwork at home, they establish an important bond between school and home. Recent studies have documented the increased achievement of students whose parents are involved in their schooling.[7] Civics topics lend themselves well to home discussion, since they are the basics for citizens regardless of their age.

---

[6] Donahue, P.L., Voelkl, K.E., Campbell, J.R. & Mazzeo, J. (1999). *NAEP 1998 reading report card for the nation and the states.* (NCES Publication No. 1999-500). Washington, DC: National Center for Education Statistics.

Greenwald, E.A., Persky, H.R., Campbell, J.R., & Mazzeo, J. (1999). *NAEP 1998 writing report card for the nation and the states.* (NCES Publication No., 1999-462). Washington, DC: National Center for Education Statistics.

[7] Christenson, S.L. (1992). Family factors and student achievement: An avenue to increase students' success. *School Psychology Quarterly*, 7(3), 178-206.

Table 5.6

Summary of examples of pairs of percentages of students with significant differences between social studies teachers who participated in social studies workshops in the past year and those who did not, by type of instructional activity, grades 4 and 8: 1998

How often do you use the following resources to teach social studies in this class?	**Grade 4**		**Grade 8**	
	Used more	**Used less**	**Used more**	**Used less**
Social studies textbook				✓ 75–63
Books, newspapers, magazines	✓ 4–10		✓ 34–52	
Primary documents	✓ 23-40		✓ 1–4	
Quantitative data, charts, or graphs				
Computer software	✓ 13–30		✓ 14–31	
Films, videos, filmstrips				
Have students complete a worksheet		✓ 6-11		
Give a lecture				
Have students do a group activity/project	✓ 9-17			
Have students write a three or more page report			✓ 37–50	
Have students participate in debates	✓ 20–32		✓ 33–47	
Have students participate in mock trials	✓ 24–34		✓ 35–46	
Have students write letters	✓ 24–29		✓ 16–31	

✓ Indicates a significant difference in the percentage of students experiencing the instructional activity.

NOTE: Teachers could rate the frequency of their use of the instructional activities above as: almost every day, once or twice a week, once or twice a month, or never or hardly ever. The pairs of percentages in the table are representative of at least one difference within a frequency-of-use category. Often there was more than one significant difference per category. For simplicity of display, only one example (usually that with the largest percentages of students - not necessarily that with the largest difference) is shown.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Students in the 1998 civics assessment were asked how often they discussed things they have studied in school (in any subject, not only civics) with someone at home. Their responses are summarized in Table 5.7. In every grade there is an association between frequency of discussion at home and average civics scale scores. The percentage of students reporting daily discussion appears to decline as grade level increases — from 53 percent at grade 4 to 33 percent at grade 12. However, the percentage of students who reported "never or hardly ever" discussing schoolwork at home remains fairly constant across grades (18 to 22 percent). About two-thirds or more of students across the three grades reported discussing schoolwork at home at least once a week (75 percent at grade 4, 67 percent at grade 8, and 64 percent at grade 12).

In every grade, students who reported that they "never or hardly ever" discussed schoolwork at home had lower average scores than those who reported having some regular discussions.

Table 5.7

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by frequency of discussion of school studies at home, grades 4, 8, and 12: 1998

How often do you discuss things you have learned at school with someone at home?	**Percentage of students**	**Average scale score**	**Percentage at or above *Proficient***
		Grade 4	
Daily	53	153	26
Once or twice a week	22	154	26
Once or twice a month	7	147	19
Never or hardly ever	18	140	13
		Grade 8	
Daily	40	157	28
Once or twice a week	27	153	25
Once or twice a month	12	147	19
Never or hardly ever	21	140	13
		Grade 12	
Daily	33	157	32
Once or twice a week	31	154	29
Once or twice a month	14	150	26
Never or hardly ever	22	139	16

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Student volunteer work

The past decade has seen increased emphasis on volunteering for community work — both among schoolchildren and adults. The welfare of the community is a topic inherent to civics education and, consequently, at grade 12 the students in the NAEP assessment were asked a question about whether they volunteered for work in their communities during the past year. Table 5.8 presents the results. More than half (58 percent) indicated that they had done some volunteer work. The student volunteers were nearly evenly split between volunteering through their school and volunteering on their own (students could choose only one of the options). Twelfth-grade students who did volunteer work, whether through their school or on their own, had significantly higher civics assessment scale scores than students who did not participate in volunteer work.

Table 5.8

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by volunteer work status, grade 12: 1998

	Grade 12		
Did you do volunteer work in your community this year?	**Percentage of students**	**Average scale score**	**Percentage at or above *Proficient***
Yes, with my school	27	159	35
Yes, on my own	31	158	34
No	43	141	16

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Students working at paid jobs

Significant percentages of students in their final year of secondary school are working at jobs for pay. The Third International Mathematics and Science Study (TIMSS) found that twelfth-grade students in the United States reported working at a paid job for an average of 3.1 hours per "normal schoolday"[8] — far more than students in any of the other 20 countries in the study. Twelfth-grade students in the NAEP civics assessment were asked about the number of hours per week they worked at a job for pay, and the results are displayed in Table 5.9. Almost two-thirds (65 percent) of the twelfth-grade students indicated at least some hours worked each week. About a fifth (21 percent) of the students reported working more than 21 hours per week. Nearly half (49 percent) worked eleven or more hours per week.

Table 5.9

Percentage of students, average civics scale scores, and percentage at or above *Proficient* by hours per week working at a job for pay, grade 12: 1998

	Grade 12		
How many hours do you work at a job for pay?	**Percentage of students**	**Average scale score**	**Percentage at or above *Proficient***
None	36	152	30
1-5 hours	7	155	35
6-10 hours	9	157	34
11-15 hours	11	159	33
16-20 hours	17	152	25
21 or more hours	21	142	16

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

---

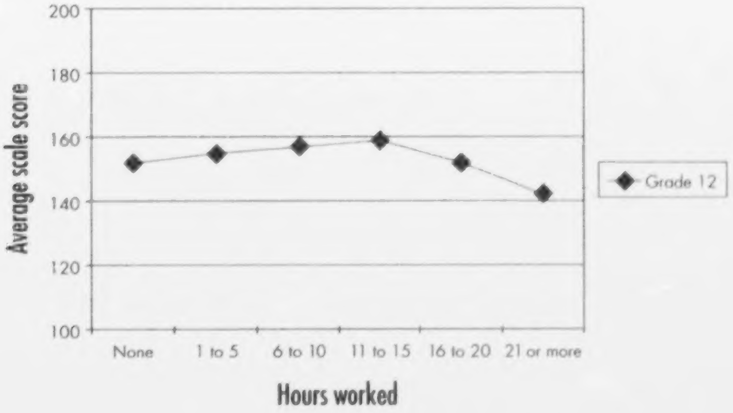
[8] Mullis, I.V.S., Martin, M.O., Beaton, A.E., Gonzalez, E.J., Kelly, D.L. & Smith, T.A. (1998). *Mathematics and science achievement in the final year of secondary school: IEA's third international mathematics and science study*. Chestnut Hill, MA: Center for the Study of Testing, Evaluation, and Educational Policy, Boston College.

It is reasonable to assume that the more hours a student works, the fewer hours are available for homework and study. However, as was discovered in the TIMSS study, the relationship between hours worked and performance on the assessment is not simple and linear. It is not the case, for example, that students who did not work at all produced the highest scores. In the NAEP assessment, students who worked a moderate number of hours (between 6 and 15) per week had the highest scores on the assessment. Their scores were significantly above those for both the group who did not work ***and*** the groups who worked longer hours per week. Figure 5.1 displays this curvilinear relationship between hours worked and civics assessment average scores. The same pattern was found in the TIMSS study, where the subjects assessed were mathematics and science literacy.

Figure 5.1

THE NATION'S REPORT CARD naep

Average civics scale scores by hours worked at a job for pay, grade 12: 1998



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Summary

This chapter focused on classroom contexts for learning social studies, interactions between teacher experience and instructional activities, and a selection of out-of-classroom variables related to twelfth-grade students. Highlights of the findings include the following:

- Over 70 percent of students at both grades 4 and 8 indicated that they had studied the U.S. Constitution and Congress in the current school year.
- Generally less than half the fourth- and eighth-grade students indicated that they had studied other countries' governments or international organizations such as the UN.
- For both grades 4 and 8, the highest percentages of students were taught on a weekly basis with what might be termed "traditional" instructional activities: using the social studies textbook; using quantitative data, charts, or graphs; completing worksheets; hearing a teacher's lecture; and using books, newspapers or magazines.
- Instructional activities that were used on a weekly basis with low percentages of students included: use of computer software; writing a three or more page report; participating in debates or mock trials; and, writing letters on civic topics.
- Only 35 percent of students in the fourth grade and 43 percent in the eighth grade received group activities or projects on at least a weekly basis. However, in both grades, small group activities were employed more commonly (53 percent in fourth grade and 52 percent in eighth grade) on a once- or twice-a-month basis — and the assessment results in grade 8 indicated that students in this frequency category outscored students in the "Never or hardly ever" activity category.

- The groups of students taught by experienced teachers in grade 4 had significantly higher average scores on the civics assessment in at least one frequency-of-use-category for every one of the listed instructional activities. This pattern of advantage for experienced over less experienced teachers did not appear, however, in grade 8.

- In grade 4, 58 percent of students were taught by teachers who had attended professional development activities in the past year. At grade 8, the parallel figure was 65 percent. Teachers at grade 4 who attended workshops taught fewer students using worksheets and more students using group activities and the "active" instructional techniques of debates, mock trials and letter writing as well as external resources such as books and magazines. Teachers at grade 8 who attended workshops used textbooks less and taught greater percentages of students using more external source materials, extended reports, debates, and mock trials.

- In every grade there is a positive association between frequency of discussion of schoolwork at home and average civics scale scores. At least two-thirds of students across the three grades reported discussing schoolwork at home at least once a week.

- More than half of twelfth-grade students indicated they did some volunteer work in their communities. Those who volunteered had higher civics scores than those who never volunteered.

- Almost two-thirds of the twelfth-grade students indicated at least some hours worked each week at a job for pay. About a fifth (21 percent) of the students reported working more than 21 hours per week. Students who worked a moderate number of hours (between 6 and 15) had the highest scores on the assessment.

APPENDIX A

Overview of Procedures Used in the NAEP 1998 Civics Assessment

Introduction

This appendix provides information about the methods and procedures used in NAEP's 1998 civics assessment. The *NAEP 1998 Civics Technical Report* contains more extensive information about these procedures.

This NAEP report is based on results from six fourth-grade civics exercise blocks, eight eighth-grade civics exercise blocks, and eight twelfth-grade civics exercise blocks. In addition, there were two trend blocks at each grade. (Results of the trend study will appear in a separate report.) The assessment in each of the grades was conducted during the 1997-98 school year. More information about the composition of the civics assessment is presented below.

Background of the Civics Assessment

The 1998 civics assessment measured student achievement based on assessment objectives developed by nationally representative panels of civics educators and concerned citizens. The objectives for each assessment were based on the framework assessment developed by The Council of Chief State School Officers in conjunction with the Center for Civic Education and the American Institutes for Research and approved by the National Assessment Governing Board to reflect content and process in school civics. That is, the objectives for the 1998 civics assessment were not comparable to those of the 1988 assessment, and thus, results are not comparable to those of previous years.

BEST COPY AVAILABLE

The 1998 civics assessment contained multiple-choice and constructed-response questions measuring aspects of the framework and specifications. Each assessment booklet contained blocks of student background questions as well as civics cognitive questions. The civics assessment contained a range of questions measuring performance on sets of objectives developed by a nationally representative panel of citizens. The framework's purpose was to provide a definition of civics on which to base the NAEP assessment. Developing this framework and the specifications that guided development of the assessment involved the critical input of many people, including representatives of national education organizations, teachers, parents, policymakers, business leaders, and members of the general public. This consensus process was managed by the Council of Chief State School Officers for the National Assessment Governing Board.

NAEP previously assessed students' performance in a civics assessment conducted during the school year ending in 1988. Because of the development of a completely new framework and specifications, direct comparisons between the results of the 1998 assessment and earlier assessment are not possible. However, two blocks of items from the 1988 assessment, based on the old framework, were readministered to a subsample of students at each grade in 1998, making possible a 10-year comparison of performance on certain of the 1988 items. The results will be published in a forthcoming separate report.

The tasks required students to read and answer questions based on a variety of materials. The assessment was designed to evaluate students' ability to recall specific information, make inferences based on an information passage or graphical stimulus (e.g., a political cartoon), or perform more analytical or evaluative tasks such as distinguishing opinion from fact or defending a position. The assessment administered at grade 4 included 90 items, 21 of them constructed-response, at grade 8, 151 items, 28 of them constructed response, and at grade 12, 152 questions, 29 of them requiring constructed responses.

The Design of the Civics Assessment

The civics assessment consisted of eight different 25-minute segments or "blocks" of content questions at grades 8 and 12, and six at grade 4. Each also contained a small set of background questions that pertained to students' experiences, instruction, and attitudes related to civics and to the testing experience.

The cognitive blocks were assembled two to a booklet, together with a general background questionnaire, a civics background questionnaire, and a motivation block that were common to all booklets. The general background questionnaire included questions about demographic information and home environment. The blocks were placed in 32 booklets (18 at grade 4), each containing 15 items in grade 4, and all but one containing 19 items (the exception containing 18) in the other two grades.

Sampling and Data Collection

Sampling and data collection activities for the 1998 civics assessment were conducted by Westat, Inc. Based on procedures used since the inception of NAEP, the data collection for all three grades took place in the winter (January to March 1998).

As with all NAEP national assessments, students in the civics assessment attending both public and nonpublic schools were selected for participation based on a stratified, three-stage sampling plan. The first stage included defining geographic primary sampling units (PSUs), which are typically groups of contiguous counties, but sometimes a single county; classifying the PSUs into strata defined by region and community type; then selecting PSUs with probability proportional to size. In the second stage, both public and nonpublic schools are selected within each PSU that was selected at the first stage. The third stage involved randomly selecting students within a school for participation. (See the forthcoming *NAEP 1998 Technical Report* for further details.) A small number of students selected for participation was excluded because of limited English proficiency or severe disability. However, testing accommodations were offered to facilitate including as many of these students as possible.

The student sample sizes for the civics assessment, as well as the school and student participation rates, are presented in the following tables. The numbers in the tables are based on the full grade samples of students, taken when the grade samples were collected. Student sample sizes appear in Table A.1. School and student participation rates are shown in Table A.2. Although sampled schools that refused to participate were replaced, school cooperation rates were computed based on the schools originally selected for participation in the civics assessment. The student participation rates represent the percentage of students assessed of those invited to be assessed, including those assessed in follow-up sessions when necessary.

Table A.1

NAEP civics sample sizes of main assessment and trend assessment, grades 4, 8, and 12: 1998

	Grade 4	Grade 8	Grade 12
Main assessment			
Assessed sample size	5,948	8,212	7,763
Excluded	407	341	247
*Trend assessment**			
Assessed sample size	2,088	2,055	2,193
Excluded**	176	186	103

*Results reported separately.

**Accommodations were offered in the Main Civics Assessment, but were not available in the special trend study, so as to preserve comparability to 1988. About half as many students in the main study were accommodated as were excluded. In the trend samples, most, but not all students who would have been offered accommodations had they been in the main study were excluded, leading to higher exclusion rates in the trend study.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table A.2

NAEP civics school and student participation rates for the nation, grades 4, 8, and 12: 1998

	Grade 4	Grade 8	Grade 12
Civics main assessment			
School participation rate	88.6%	84.6%	78.0%
Student participation rate	94.8%	92.3%	79.4%

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

The overall response rate (the product of the weighted school participation rate before substitution and the weighted student participation rate) for grade 12 fell below the NCES reporting target of 70 percent. As a result, the background characteristics of both responding schools and all schools were compared to determine whether there was bias evident. The similarities in the distribution lend support to the conclusion that the data are not seriously biased by these low response rates.

Students with Disabilities (SD) and Limited English Proficient (LEP) Students

It is NAEP's intent to assess all selected students from the target population. Therefore, every effort is made to ensure that all selected students who are capable of participating in the assessment are assessed. Some students sampled for participation in NAEP can be excluded from the sample according to carefully defined criteria. These criteria were revised in 1996 to more clearly communicate a presumption of inclusion except under special circumstances. According to these criteria, students with Individualized Education Programs (IEPs) were to be included in the NAEP assessment except in the following cases:

1. The school's IEP team determined that the student could not participate, OR,
2. The student's cognitive functioning was so severely impaired that she or he could not participate.

In cases where a student's IEP required that the student be tested with an accommodation or adaptation and stated that the student could not demonstrate his or her knowledge without that accommodation, the student was provided with the appropriate accommodation.

All LEP students receiving academic instruction in English for three years or more were to be included in the assessment. Those LEP students receiving instruction in English for less than three years were to be included unless school staff judged them incapable of participating in the assessment in English.

The reporting samples in the 1998 civics assessment used these criteria, with provisions made for accommodations. Students with disabilities or with limited English proficiency were included in the sample in the following way. At each grade one test booklet (two blocks) was designated to be the one administered to students requiring accommodations (the booklet was also administered to students not requiring accommodations). The booklet contained relatively few visual stimuli, for the sake of visually impaired students who might participate. Students were given accommodations that matched as closely as possible those provided them in other testing situations by their schools or instructors (most frequently, small group administration). Those students who did not typically need accommodations for testing were not provided with them.

All the scale score and achievement level information in this report is based on a student sample that includes students who were provided with accommodations. The responses of students assessed with accommodations were evaluated according to the same criteria as those of students assessed without accommodations. Data on the individual questions presented in chapter 1, however, do not include responses from accommodated students because the questions only appeared in test booklets that were not administered to students requiring accommodations.

Participation rates for the students with disabilities and LEP samples are presented in Table A.3 for all three grades. This table includes as the denominator the total number of all students who were identified for the assessment, including assessed and excluded students. The columns then show the raw numbers and weighted percentages of SD and LEP students who were identified for the assessment. The numbers and percentage are broken out by those excluded and those assessed, then further broken out into those assessed without accommodations and those assessed with accommodations.

Table A.3

Students with disabilities and limited English proficient students in NAEP civics assessment: National sample, public and nonpublic schools combined: 1998

	Grade 4		Grade 8		Grade 12	
Students that are:	**Number of students**	**Weighted percentage of students sampled**	**Number of students**	**Weighted percentage of students sampled**	**Number of students**	**Weighted percentage of students sampled**
SD and LEP Students						
Identified	1,064	15	1,099	13	759	8
Excluded	407	5	341	4	247	2
Assessed	657	10	758	9	512	6
Assessed without accommodations	450	6	537	6	406	5
Assessed with accommodations	207	3	221	3	106	1
Students with disabilities						
Identified	608	11	811	11	513	6
Excluded	213	3	252	3	212	2
Assessed	395	7	559	8	301	4
Assessed without accommodations	216	4	354	4	209	3
Assessed with accommodations	179	3	205	3	92	1
Limited English proficient students						
Identified	493	5	332	3	266	2
Excluded	221	2	116	1	46	▲
Assessed	272	3	216	2	220	2
Assessed without accommodations	240	2	192	2	201	2
Assessed with accommodations	32	▲	24	▲	19	▲

▲ Percentage is between 0.0 and 0.5.

NOTE: The combined SD/LEP portion of the table is not a sum of the separate SD and LEP portions because some students were identified as both SD and LEP. Such students would be counted separately in the bottom portions but counted only once in the top portion. Within each portion of the table, percentages may not sum properly due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

BEST COPY AVAILABLE

Table A.4 displays the numbers and percentages of SD and LEP students assessed with the variety of available accommodations. It should be noted that students assessed with accommodations typically received some combination of accommodations. For example, students assessed in small groups (as compared to standard NAEP sessions of about 30 students) usually received extended time and had directions and/or assessment questions read aloud as needed. In one-on-one administrations, students often received assistance in recording answers, had directions and questions read aloud, and were afforded extra time. Extended time was considered the primary accommodation only when it was the only accommodation provided.

Tables A.4a and A.4b display the accommodations data for students with disabilities and LEP students, respectively. The denominator used to calculate the percentages for each of these tables is the total number of SD or LEP students assessed, as appropriate to the table.

Table A.4

SD and LEP students assessed with and without accommodations, NAEP civics assessment: National sample, public and nonpublic schools combined: 1998

	Grade 4		Grade 8		Grade 12	
	Number of students	**Weighted percentage of assessed SD/LEP students**	**Number of students**	**Weighted percentage of assessed SD/LEP students**	**Number of students**	**Weighted percentage of assessed SD/LEP students**
Total number of assessed SD/LEP students	657	100	758	100	512	100
Assessed without accommodations	450	64	537	65	406	78
Assessed with accommodations	207	36	221	35	106	22
Primary accommodation:						
Large print	1	▲	1	▲	1	▲
Extended time	51	8	70	11	40	8
Read aloud	6	1	9	1	1	▲
Bilingual dictionary	1	▲	1	▲	2	▲
Small group	125	22	128	20	54	12
One-on-one	15	3	8	1	6	1
Scribe or computer	3	1	2	1	0	0
Other	5	1	2	▲	2	1

▲ Percentage is between 0.0 and 0.5.

SD = Students with Disabilities (the term previously used was IEP)
LEP = Limited English Proficient students

NOTE: Percentages are based on total combined SD and LEP students assessed.

The sum of percentages of students by primary accommodation may not total the overall percentage assessed with accommodations due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table A.4a

Students with disabilities assessed with and without accommodations, NAEP civics assessment: National sample, public and nonpublic schools combined: 1998

	Grade 4		Grade 8		Grade 12	
	Number of students	Weighted percentage of assessed SD students	Number of students	Weighted percentage of assessed SD students	Number of students	Weighted percentage of assessed SD students
Total number of assessed SD students	395	100	559	100	301	100
Assessed without accommodations	216	56	354	60	209	71
Assessed with accommodations	179	44	205	40	92	29
Primary accommodation:						
Large print	1	▲	1	▲	1	▲
Extended time	39	9	60	12	34	10
Read aloud	4	1	8	1	1	▲
Bilingual dictionary	1	▲	0	0	0	0
Small group	114	29	124	24	48	16
One-on-one	12	3	8	2	6	2
Scribe or computer	3	1	2	1	0	0
Other	5	1	2	▲	2	1

▲ Percentage is between 0.0 and 0.5

SD = Students with Disabilities (the term previously used was IEP)

NOTE: Percentages are based on total SD students assessed.

The sum of percentages of students by primary accommodation may not total the overall percentage assessed with accommodations because of rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table A.4b

Limited English proficient students assessed with and without accommodations, NAEP civics assessment: National sample, public and nonpublic schools combined: 1998

	Grade 4		Grade 8		Grade 12	
	Number of students	**Weighted percentage of assessed LEP students**	**Number of students**	**Weighted percentage of assessed LEP students**	**Number of students**	**Weighted percentage of assessed LEP students**
Total number of assessed LEP students	272	100	216	100	220	100
Assessed without accommodations	240	89	192	90	201	92
Assessed with accommodations	32	11	24	10	19	8
Primary accommodation:						
Large print	0	0	0	0	0	0
Extended time	12	4	12	6	8	3
Read aloud	2	1	3	1	0	0
Bilingual dictionary	0	0	1	▲	2	1
Small group	13	5	8	3	7	3
One-on-one	4	2	0	0	2	1
Scribe or computer	0	0	0	0	0	0
Other	1	▲	0	0	0	0

▲ Percentage is between 0.0 and 0.5.

LEP = Limited English Proficient students

NOTE: Percentages are based on total LEP students assessed.

The sum of percentages of students by primary accommodation may not total the overall percentage assessed with accommodations because of rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Scoring the Booklets

Booklets from NAEP 1998 civics assessment were shipped to National Computer Systems (NCS) in Iowa City, Iowa, for processing. Receipt and quality control were managed through a sophisticated bar-coding and tracking system. After all appropriate materials were received from a school, they were forwarded to the professional scoring area, where the responses to constructed-response questions were evaluated by trained staff using guidelines prepared by NAEP. Each constructed-response question had a unique scoring guide that defined the criteria to be used in evaluating students' responses. Subsequent to the professional scoring, the booklets were scanned and all information was transcribed to the NAEP database at ETS. Each processing activity was conducted with rigorous quality control. An overview of the professional scoring follows.

Scoring the Civics Constructed-Response Questions

Most of the constructed-response questions were scored on a partial credit basis. The scoring guides identified the correct or acceptable answers for each question in each block. The scores for these questions included a 0 for no response and a 1 for an incorrect or "I don't know" response. Completely correct answers received from 2 to 4 points, with intermediate scores awarded for varying degrees of partial credit. Because of the complex nature of the scoring, lengthy training was required. In an orientation period, the readers were trained to follow the procedures for scoring the questions and given an opportunity to become familiar with the scoring guides.

The 1998 grade 8 assessment included 28 questions for which students were required to construct written responses. The scoring guides for the constructed-response questions focused on students' ability to perform various tasks: for example, identifying the intended message of a poster and substantiating their interpretations with examples. The scoring guides for the questions varied somewhat, but typically included the distribution of score points shown below in Table A.5.

Table A.5

Labels for score levels of polytomous items, NAEP civics assessment: 1998

Score	3-category item	4-category item
4		Complete
3	Complete	Acceptable
2	Partial	Partial
1	Unacceptable	Unacceptable
0	Off-task, or omitted	Off-task, or omitted

NOTE: The categories falling between "Unacceptable" and "Complete" represent increasing levels of a partially correct response.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

The training program for the assessment scoring was carried out on all assessment questions, one at a time, for each age group and covered the range of student responses. The actual training was conducted by ETS staff assisted by NCS's scoring director and team leaders. Training began with each reader receiving a photocopied packet of materials consisting of a scoring guide, a set of 10–15 anchor papers, and an additional 15–20 response samples to be scored by the reader for practice. The trainers reviewed the scoring guide with the readers, explained all the applicable score points, and elaborated on the rationale used to arrive at a particular score. The readers then reviewed the anchor papers, as the trainers clarified and elaborated on the scoring guide. After this explanation, the practice samples were scored and discussed until the readers were in agreement. If necessary, additional packets of 1998 responses were used for practice scoring.

After some further discussion, scoring of the 1998 responses began. If scoring of a question ran over to a second day, the readers reviewed the scoring guides and scored 10–20 "qualification" sample papers before resuming scoring.

Real-time reliability studies were conducted as part of this scoring, and the results fed back to scoring table leaders to monitor and improve results through rescoring and retraining. For the 1998 material, 25 percent of the constructed responses were scored by a second reader to produce interreader reliability statistics. The reliability information from these studies is shown in Table A.6.

Table A.6

Interrater reliabilities for scoring of civics open-ended items, grades 4, 8, and 12: 1998

	Grade 4	Grade 8	Grade 12
Percent exact agreement	89	87	85
Range of percent agreement	81–98	68–96	72–93
Reliability coefficient	.897	.895	.896

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Data Analysis and IRT Scaling

After the assessment information had been compiled in the NAEP database, the data were weighted according to the sample design and the population structure. The weighting for the samples reflected the probability of selection for each student as a result of the sampling design, adjusted for nonresponse. Through poststratification, the weighting assured that the representation of certain subpopulations corresponded to figures from the U.S. Census and the Current Population Survey.

Analyses were then conducted to determine the percentage of students who gave various responses to each cognitive and background question. Item response theory (IRT) was used to estimate average proficiency for the nation and for various subgroups of interest within the nation. IRT scaling was performed separately within each grade level for each of the three civics assessment grades.

IRT models the probability of answering a question correctly as a mathematical function of proficiency or skill. The main purpose of IRT analysis is to provide a common scale on which performance can be compared across groups, such as those defined by age, assessment year, or subpopulations (e.g., race/ethnicity or gender).

Students do not receive enough questions about a specific topic to permit reliable estimates of individual performance. Traditional test scores for individual students, even those based on IRT, would contribute to misleading estimates of population characteristics, such as subgroup averages and percentages of students at or above a certain proficiency level. Instead, NAEP constructs sets of plausible values designed to represent the distribution of proficiency in the population.[1] A plausible value for an individual is not a scale score for that individual but may be regarded as a representative value from the distribution of potential scale scores for all students in the population with similar characteristics and identical patterns of item response. Statistics describing performance on the NAEP scales are based on these plausible values. These statistics estimate values that would have been obtained had individual proficiencies been observed, that is, had each student responded to a sufficient number of cognitive questions so that his or her proficiency could be precisely estimated. For the 1998 civics exercises, a single IRT scale was constructed for each grade. These scales had identical means and standard deviations, so that reflecting the assessment design with no common items across grades, cross-grade comparisons are neither meaningful nor possible.

For the civics assessment, a scale ranging from 0 to 300 was created, using a generalized partial-credit (GPC) model.[2] Developed by ETS and first used in 1992, the GPC model permits the scaling of tasks scored according to multi-point rating schemes. The model takes full advantage of the information available from each of the student response categories used for these more complex performance tasks.

As described earlier, the NAEP scales for all the subjects make it possible to examine relationships between students' performance and a variety of background factors measured by NAEP. The fact that a relationship exists between achievement and another variable, however, does not reveal the underlying cause of the relationship, which may be influenced by a number of other variables. Similarly, the civics assessment does not capture the influence of unmeasured variables. The results are most useful when they are considered in combination with other information about the student population and the educational system, such as changes in instruction, changes in the school-age population, and societal demands and expectations.

---

[1] For theoretical justification of the procedures employed, see Mislevy, R.J. (1988). Randomization-based inferences about latent variables from complex samples. *Psychometrika*, 56 (2), 177-96.

For computational details, see the forthcoming *NAEP 1998 Technical Report*.

[2] Muraki, E. (1992). A generalized partial-credit model: Application of an EM algorithm. Applied *Psychological Measurement*, *16*(2), 159-176.

NAEP Reporting Groups

This report contains results for the nation and for groups of students within the nation defined by shared characteristics. The subgroups defined by race/ethnicity, parents' education level, gender, and region are defined below.

Race/Ethnicity

Results are presented for students in different racial/ethnic groups according to the following mutually exclusive categories: White, Black, Hispanic, Asian/Pacific Islander, and American Indian (including Alaskan Native). Some racial/ethnic results are not reported separately because there were too few students in the group. The data for all students, regardless of whether their racial/ethnic group was reported separately, were included in computing the overall national results.

Two questions from the set of general student background questions were used to determine race/ethnicity:

If you are Hispanic, what is your Hispanic background?

- ☐ I am not Hispanic.
- ☐ Mexican, Mexican American, or Chicano
- ☐ Puerto Rican
- ☐ Cuban
- ☐ Other Spanish or Hispanic background

Students who responded to this question by filling in the second, third, fourth, or fifth oval were considered Hispanic. For students who filled in the first oval, did not respond to the question, or provided information that was illegible or could not be classified, responses to the following question were examined to determine their race/ethnicity:

Which best describes you?

- ☐ White (not Hispanic)
- ☐ Black (not Hispanic)
- ☐ Hispanic ("Hispanic" means someone who is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or from some other Spanish or Hispanic background.)
- ☐ Asian or Pacific Islander ("Asian or Pacific Islander" means someone who is from a Chinese, Japanese, Korean, Filipino, Vietnamese, Asian American, or from some other Asian or Pacific Island background.)
- ☐ American Indian or Alaskan Native ("American Indian or Alaskan Native" means someone who is from one of the American Indian tribes, or one of the original people of Alaska.)
- ☐ Other (specify) ______________________________

Parents' Education Level

Students were asked to indicate the extent of schooling for each of their parents: did not finish high school, graduated from high school, had some education after high school, or graduated from college. The response indicating the higher level of education for either parent was selected for reporting.

Students were asked to indicate the extent of their mother's education by answering the following three questions:

Did your mother graduate from high school? ("Mother" can be a mother, stepmother, or female guardian.)

☐ Yes
☐ No
☐ I don't know.

Did your mother have some education after high school? ("Mother" can be a mother, stepmother, or female guardian.)

☐ Yes
☐ No
☐ I don't know.

Did your mother graduate from college? ("Mother" can be a mother, stepmother, or female guardian.)

☐ Yes
☐ No
☐ I don't know.

Students were asked the same three questions about their father's education level, as shown below:

Did your father graduate from high school? ("Father" can be a father, stepfather, or male guardian.)

☐ Yes
☐ No
☐ I don't know.

Did your father have some education after high school? ("Father" can be a father, stepfather, or male guardian.)

☐ Yes
☐ No
☐ I don't know.

Did your father graduate from college? ("Father" can be a father, stepfather, or male guardian.)

- ☐ Yes
- ☐ No
- ☐ I don't know.

Gender

Results are reported separately for males and females. Gender was reported by the student.

Region

The United States was divided into four regions: Northeast, Southeast, Central, and West. States in each region are shown on the map below. Each state except Virginia is contained entirely in one region. The part of Virginia that is part of the Washington, D.C.-Maryland-Virginia metropolitan statistical area is included in the Northeast region; the remainder of the state is included in the Southeast region.

Figure A.1

States included in the four NAEP regions

Northeast	Southeast	Central	West
Connecticut	Alabama	Illinois	Alaska
Delaware	Arkansas	Indiana	Arizona
District of Columbia	Florida	Iowa	California
Maine	Georgia	Kansas	Colorado
Maryland	Kentucky	Michigan	Hawaii
Massachusetts	Louisiana	Minnesota	Idaho
New Hampshire	Mississippi	Missouri	Montana
New Jersey	North Carolina	Nebraska	Nevada
New York	South Carolina	North Dakota	New Mexico
Pennsylvania	Tennessee	Ohio	Oklahoma
Rhode Island	*Virginia	South Dakota	Oregon
Vermont	West Virginia	Wisconsin	Texas
*Virginia			Utah
			Washington
			Wyoming

* The part of Virginia that is included in the Washington, DC metropolitan area is included in the Northeast region; the remainder of the state is included in the Southeast region.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Weighting and Variance Estimation

A complex sample design was used to select the students who were assessed. The properties of a sample selected through a complex design could be very different from those of a simple random sample, in which every student in the target population has an equal chance of selection and in which the observations from different sampled students can be considered to be statistically independent of one another. Therefore, the properties of the sample for the complex data collection design were taken into account during the analysis of the assessment data. Standard errors calculated as though the data had arisen from a simple random sample would generally underestimate sampling error.

One way that the properties of the sample design were addressed was by using sampling weights to account for the fact that the probabilities of selection were not identical for all students. All population and subpopulation characteristics based on the assessment data used sampling weights in their estimation. These weights included adjustments for school and student nonresponse.

The statistics presented in this report are estimates of group and subgroup performance based on samples of students, rather than the values that could be calculated if every student in the nation answered every assessment question. It is therefore important to have measures of the degree of uncertainty of the estimates. Accordingly, in addition to providing estimates of percentages of students and their average scale score, this report provides information about the uncertainty of each statistic.

Two components of uncertainty are accounted for in the variability of statistics based on scale scores: the uncertainty due to sampling only a small number of students relative to the whole population and the uncertainty due to sampling only a relatively small number of questions. The variability of estimates of percentages of students having certain background characteristics or answering a certain cognitive question correctly is accounted for by the first component alone. Because NAEP uses complex sampling procedures, conventional formulas for estimating sampling variability that assume simple random sampling are inappropriate. For this reason, NAEP uses a jackknife replication procedure to estimate standard errors due to sampling from means of paired primary sampling units (PSU's). The jackknife standard error provides a reasonable measure of uncertainty for any information about students that can be observed without error, but each student typically responds to so few questions within any content area that the scale score for any single student would be imprecise. In this case, using plausible values technology makes it possible to describe the performance of groups and subgroups of students, but the underlying imprecision that makes this step necessary adds an additional component of measurement variability to statistics based on NAEP scale scores. Normally, each analysis is done once for each available plausible value, and the variance of the (usually 5) resulting statistics estimated with the jackknife technique. To replicate the analyses reported here, the secondary analyst must have access to both the plausible values and replicate weights employed. Licenses to use these data are available by application to NCES.

The reader is reminded that, like those from all surveys, NAEP results are also subject to other kinds of errors, including the effects of necessarily imperfect adjustments for student and school nonresponse and other largely unknowable effects associated with the particular instrumentation and data collection methods used. Nonsampling errors can be attributed to a number of sources: inability to obtain complete information about all selected students in all selected schools in the sample (some students or schools refused to participate, or students participated but answered only certain questions); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording, coding, or scoring data; and other errors of collecting, processing, sampling, and estimating missing data. The extent of nonsampling errors is difficult to estimate. By their nature, the impacts of such error cannot be reflected in the data-based estimates of uncertainty provided in NAEP reports.

Drawing Inferences from the Results

Confidence Intervals Around Means and Percentages

The use of confidence intervals, based on the standard errors, provides a way to make inferences about the population averages and percentages in a manner that reflects the uncertainty associated with the sample estimates. An estimated sample scale score average ± 2 standard errors represents about a 95 percent confidence interval for the corresponding population quantity. This means that with 95 percent certainty, the average performance of the entire population of interest is within about ± 2 standard errors of the sample average.

As an example, suppose that the average scale score of students in a particular group was 156, with a standard error of 1.2. A 95 percent confidence interval for the population quantity would be as follows:

$$\text{Average} \pm 2 \text{ standard errors} = 156 \pm 2\,(1.2) = 156 \pm 2.4 =$$
$$156 - 2.4 \text{ and } 156 + 2.4 = (153.6,\ 158.4)$$

Thus, one can conclude with close to 95 percent certainty that the average scale score for the entire population of students in that group is between 153.6 and 158.4.

Similar confidence intervals can be constructed for percentages, provided that the percentages are not extremely large or extremely small. For percentages, confidence intervals constructed in the manner above work best when sample sizes are large, and the percentages being tested have magnitude relatively close to 50 percent. Statements about group differences should be interpreted with caution if at least one of the groups being compared is small in size and/or if "extreme" percentages are being compared. Percentages, P, were treated as "extreme" if:

$P < P_{lim} = \frac{200}{N_{EFF}+2}$, where the effective sample size is $N_{EFF} = \frac{P(100 - P)}{(SE_{jk})^2}$, and SE_{jk} is the jackknife standard error of P.

This "rule of thumb" cutoff leads to flagging a large proportion of confidence intervals that would otherwise include values less than 0 or greater than 100. In either extreme case, the confidence intervals described above are not appropriate, and procedures for obtaining accurate confidence intervals are quite complicated. In this case, the value of P was reported, but no standard error was estimated and hence no tests were conducted.

As for percentages, confidence intervals for average scale scores are most accurate when sample sizes are large. For some of the subgroups of students for which average scale scores or percentages were reported, student samples sizes could be quite small. For results to be reported for any subgroup, a minimum student sample size of 62 was required. If students in a particular subgroup were clustered within a small number of geographic primary sampling units (PSUs), the estimates of the standard errors might also be inaccurate. So, subgroup data were required to come from a minimum of five PSUs.

Comparing Means and Percentages of Different Groups

How large does a numeric difference in NAEP data have to be in order not to be a merely chance occurrence? Drawing appropriate and justifiable inferences from the data gathered in the NAEP assessment is a particularly complex statistical endeavor because: 1) a sampling design is used for data collection, and 2) no single student takes more than a section of the entire question pool. Judging the statistical differences between subgroups in the NAEP data requires an understanding of the following: confidence intervals (as noted above) and standard errors in the sampling design, the application of the t-test paradigm, the notion of degrees of freedom as applied in a stratified sample, and the application of the concepts of statistical family size in the context of making multiple comparisons. Each of these topics will be touched upon in the following sections. Because of these complexities, quick "rule of thumb" estimates of the significance of differences among, for example, scaled scores in NAEP subgroups in the data tables in this report cannot be relied upon to be accurate.

T-tests. In some cases, the differences between groups were not discussed in this report. This happened for one of two reasons: (a) if the comparison involved an extreme percentage (as defined above); or (b) if the standard error for either group was subject to a large degree of uncertainty (i.e., the coefficient of variation is greater than 20 percent, denoted by "***" in the tables).[3] In either case, the results of any statistical test involving that group needs to be interpreted with caution, and so the results of such tests are not discussed in this report.

Among the major findings reported for NAEP assessments are mean differences between groups, for example, comparisons of public and private school students. Such comparisons are assessed for statistical significance by a t-test of the form:

$$\frac{|m_i - m_j|}{\sqrt{S^2_{m_i} + S^2_{m_j}}}$$

Where:

m_i and m_j are the means for groups i and j, and $S^2_{m_i}$ and $S^2_{m_j}$ are the jackknife estimates of sampling variance for groups i and j. The reader should note that this procedure uses a conservative estimate of the standard error of the difference (i.e., one that may overstate sampling variability), since the estimates of the group averages or percentages will be positively correlated to an unknown extent due to the sampling plan. However, since sources of survey error other than sampling (e.g., error associated with item parameter estimation and the error associated with linking results across years) are not accounted for in the standard errors, using these conservative estimates has been considered advisable. Moreover, direct estimation of the standard errors of all reported differences would involve too heavy a computational burden to be implemented in practice.

Effective degrees of freedom. Because of the clustered nature of the sample, the "effective degrees of freedom" for this t-test is considerably less than the number of students entering into the comparison, and, indeed, less than the number of PSU pairs that go into its computation. (See the forthcoming *NAEP 1998 Technical Report* for more details.) The degrees of freedom of this t-test are estimated by an approximation given by Johnson & Rust[4] as follows:

---

[3] As was discussed in the section "Weighting and Variance Estimation," estimates of standard errors subject to a large degree of uncertainty are designated by the symbol "***". In such cases, the standard error — and any confidence intervals or significance tests among these standard errors — should be interpreted with caution.

$$df = \frac{\left(\sum_{k=1}^{N} S^2_{m_k}\right)^2}{\sum_{k=1}^{N}\left(\frac{S^4_{m_k}}{df_k}\right)}$$

where the summation is over the two groups being compared. The item, df_k, is the degree of freedom estimate for the variance of the mean m_k and is defined by Satterthwaite[5] with a correction term suggested by Johnson and Rust. It is derived by matching estimates of the first two moments of the variance to those of a chi-square random variable.

$$df_k = \left(3.16 - \frac{2.77}{\sqrt{L}}\right)\frac{\left(\sum_{j=1}^{L}\left(m_{jk} - m_k\right)^2\right)^2}{\sum_{j=1}^{L}\left(m_{jk} - m_k\right)^4}$$

Here, j stands for jackknife replicate j, and the summations are over all replicates, usually 62 in NAEP. The m_{jk} term is the mean of subgroup k for the jth jackknife replicate. The term m_k is the overall mean for subgroup k using the overall weights and the first plausible value.

The number of degrees of freedom for the variance equals the number of independent pieces of information used to generate the variance. In the case of data from NAEP, the pieces of information are the 62 squared differences $(m_{jk} - m_k)^2$, each supplying at most one degree of freedom (regardless of how many individuals were sampled within PSUs). If some of the squared differences $(m_{jk} - m_k)^2$ are much larger than others, the variance estimate of m_k is predominantly estimating the sum of these larger components, which dominate the remaining terms. The effective degrees of freedom of S^2_{mk} in this case will be nearer to the number of dominant terms. The estimate, df_k, reflects these relationships.

The two formulae above show us that when df_k is small, the degrees of freedom for the t-test, df, will also be small. This will tend to be the case when only a few PSU pairs have information about subgroup differences relevant to a t-test. It will also be the case when a few PSU pairs have subgroup differences much larger than other PSU pairs. With a clustered sample and a practical sample size, it is not possible to stratify over every group of potential interest. It is thus inevitable that in a particular assessment for some groups, some pairs within some PSU's will be less well-matched than others. Because this depresses the estimate of effective degrees of freedom, it has a conservative effect on declaring significance for comparisons involving those groups (see p. 35).

---

[4] Johnson, E. & Rust, K. (1992). "Effective Degrees of Freedom for Variance Estimates from a Complex Sample Survey," Proceedings of the Section on Survey Research Methods, American Statistical Association, 863–866.

[5] Satterthwaite, F.E. (1941). "Synthesis of Variance," *Psychometrika 16*, 5, 309-316.

Conducting multiple tests. In many applications of significance testing, the t-test value is compared to a t-distribution with effective degrees of freedom, as given in the previous section, and is assessed at a nominal level of .05/2 for a two-tailed test. However, in most sections of this report, many different groups are compared (i.e., multiple sets of means are being analyzed). In sets of comparisons, statistical theory indicates that the certainty associated with the entire set of comparisons is less than that attributable to each individual comparison from the set. To hold the significance level for the set of comparisons at a particular level (e.g., .05), adjustments (called "multiple comparison procedures"[6]) must be made to the methods described in the previous section. One such procedure, the False Discovery Rate (FDR) procedure,[7] was used to control the certainty level.

Unlike the other multiple comparison procedures (e.g., the Bonferroni procedure) that control the familywise error rate (i.e., the probability of making even one false rejection in the set of comparisons), the FDR procedure controls the expected proportion of falsely rejected hypotheses. Rather than holding the probability, a, of even one true null hypothesis being rejected at some level, usually .05, as does the Bonferroni procedure by setting the critical value for significance at .05/m, where m is the number of comparisons in the set, or "family size," the Benjamini and Hochberg False Discovery Rate controls the expected proportion of true null hypotheses declared significant. The FDR = Expectation (V/R), where V = Number of true null hypotheses declared significant, and R = Total number of hypotheses declared significant. This is accomplished by ordering the contrasts from most probable to least probable, and testing sequentially, with a systematically decreasing value of a until a null hypothesis is rejected. That hypothesis and all subsequent hypotheses, which have smaller probability, are declared significant. Familywise procedures are considered conservative for large families of comparisons.[8] Therefore, the FDR procedure is more suitable for multiple comparisons in NAEP than other procedures. A detailed description of the FDR procedure appears in the forthcoming *NAEP 1998 Technical Report*.

---

[6] Miller, R.G. (1966). *Simultaneous statistical inference*. New York: Wiley.

[7] Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society, Series B, No. 1*, pp. 298–300.

[8] Williams, V.S.L., Jones, L.V., & Tukey, J.W. (1994, December). *Controlling error in multiple comparisons with special attention to the National Assessment of Educational Progress*. Research Triangle Park, NC: National Institute of Statistical Sciences.

The 1998 assessment is the first time NAEP has used the Benjamini-Hochberg procedure to maintain FDR for all multiple comparisons. Prior to the 1996 assessment, the Bonferroni procedure was used for multiple comparisons. Beginning in the 1996 assessment, the Bonferroni procedure was used for multiple comparisons involving small sets of intervals, and FDR for large sets.

The Benjamin and Hochberg FDR application consists of arranging the m significance tests in order, from lowest to highest probability $P(1) \leq P(2) \ldots \leq P(m)$. To obtain an overall control of the False Discovery Rate at .05, compare $P(m)$ — the largest probability with .05. If $P(m) \leq .05$, declare all m comparisons significant. If not, compare $P(m-1)$ with $\frac{m-1}{m} \cdot (.05)$. If less than or equal to this criterion, declare $P(1) - P(m-1)$ significant. If not, follow the same procedure with $P(m-2)$ down through $P(1)$. Note that $P(1) \leq \frac{1}{m} \cdot (.05)$ is the level used in the Bonferroni procedure for all comparisons.

When we conduct multiple comparisons, the family size, or number of comparisons in a set, is a crucial issue. The investigator has a choice between prespecifying a limited number of comparisons, and thus maintaining power, or looking at many contrasts sacrificing power for the chance of finding additional significant contrasts. For example, the Parents' Highest Level of Education Variable has five categories:

Graduated from college
Some education after high school
Graduated from high school
Did not finish high school
I don't know.

If we choose Graduation from college as the target category for the set, and contrast mean proficiency of each of the other four categories with the target, our family size is four, and under FDR, any mean difference with probability $\leq .05/4 = .0125$ will certainly be declared significant. If, on the other hand we want to test all possible contrasts, family size becomes ten, and significance in the lowest probability category is guaranteed only if its probability $\leq .005$. This tension between conserving power and identifying a larger number of significant comparisons at the risk of not finding any requires careful thought and balancing. After much discussion, it has been determined that NAEP should use all possible comparisons within a set in conducting multiple comparisons.

Cautions in Interpretations

As described earlier, the NAEP civics scale makes it possible to examine relationships between students' performance and various background factors measured by NAEP. However, a relationship that exists between achievement and another variable does not reveal the underlying cause of the relationship, which may be influenced by a number of other variables. Similarly, the assessments do not capture the influence of unmeasured variables. The results are most useful when they are considered in combination with other knowledge about the student population and the educational system, such as trends in instruction, changes in the school-age population, and societal demands and expectations.

Grade-12 Participation Rates and Motivation

NAEP has been described as a "low-stakes" assessment. That is, students receive no individual scores, and their NAEP performance has no effect on their grades, promotions, or graduation. There has been continued concern that this lack of consequences affects participation rates of students and schools, as well as the motivation of students to perform well on NAEP. Of particular concern has been the performance of twelfth graders, who typically have lower student participation rates than fourth and eighth graders and who are more likely to omit responses compared to the younger cohorts.

Participation Rates

In NAEP, there has been a consistent pattern of lower participation rates for older students. The participation rate in civics for grade 12 students was 79 percent, compared with 95 percent for grade 4 students and 92 percent for grade 8 students. School participation rates (the percentage of sampled schools that participated in the assessment) have also typically decreased with increasing grade level. The school participation rate was 89 percent for the fourth grade, 85 percent for the eighth grade, and 82 percent for the twelfth grade.

The effect of participation rates on student performance, however, is unclear. Students may choose not to participate in NAEP for many reasons, such as a desire to attend regular classes so as not to miss important instruction or fear of not doing well on NAEP. Similarly, there are a variety of reasons for which various schools do not participate. The sampling weights and nonresponse adjustments, described earlier in this appendix, provide an approximate statistical adjustment for nonparticipation. However, the effect of some school and student nonparticipation may have an undetermined effect on results.

Motivation

To the extent that students in the NAEP sample are not trying their hardest, NAEP results may underestimate student performance. The concern increases as students get older and is particularly pronounced for twelfth graders. The students themselves furnish some evidence about their motivation. As part of the background questions, students were asked how important it was to do well on the NAEP writing assessment. They were asked to indicate whether it was very important, important, somewhat important, or not very important to them. The percentage of students indicating they thought it was either important or very important to do well was 88 percent for fourth graders, 59 percent for eighth graders, and 33 percent for twelfth graders.

Several factors may contribute to this pattern. NAEP was administered in the late winter, when high school seniors often have other things on their minds. Another factor that may have contributed to lack of motivation is the fact that the civics assessment consists partly of constructed-response questions which tend to be more time-consuming than multiple-choice questions. As with participation rates, however, the combined effect of these and other factors is unknown.

It is also interesting to note that students who indicated it was very important for them to do well on NAEP did not have the highest average scores. These data further cloud the relationship between motivation and performance on NAEP.

Need for Future Research

More research is needed to delineate the factors that contribute to nonparticipation and lack of motivation. To that end, NCES plans to commission a study of high school transcripts to learn more about the academic performance of twelfth-grade students who do not participate in the assessment. In addition, NCES is currently investigating how various types of incentives can be effectively used to increase participation in NAEP.

APPENDIX B

Standard Errors

The comparisons presented in this report are based on statistical tests that consider the magnitude of the difference between group averages or percentages and the standard errors of those statistics. This appendix contains the standard errors for the estimated averages and percentages in all the tables and figures throughout this report. Because NAEP scores and percentages are based on samples rather than the entire population(s), the results are subject to a measure of uncertainty reflected in the standard errors of the estimates. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Table B1.1

Standard errors for civics scale scores by percentiles: 1998

	Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
Grade 4	0.7	1.7	0.9	1.2	0.8	0.7
Grade 8	0.7	1.6	1.2	0.7	0.8	0.8
Grade 12	0.8	1.1	1.2	0.9	0.9	0.7

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

BEST COPY AVAILABLE

Table B1.2

Standard errors for percentage of students at or above the civics achievement levels for the nation: 1998

Below Basic	At or above Basic	At or above Proficient	Advanced
Grade 4			
1.0	1.0	0.9	0.3
Grade 8			
0.9	0.9	0.8	0.2
Grade 12			
0.9	0.9	0.9	0.4

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure B1.4

Standard errors for percentage of students within each civics achievement level range for the nation: 1998

Below Basic	At Basic	At Proficient	At Advanced
Grade 4			
1.0	0.8	0.9	0.3
Grade 8			
0.9	0.7	0.8	0.2
Grade 12			
0.9	0.7	0.8	0.4

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Standard Errors for Sample Response Percentages

Table B1.3 Grade 4: *Functions and purpose of government*

Overall percentage "Acceptable" or better	Standard errors for percentage "Acceptable" or better within achievement level ranges		
	Basic 136–176*	Proficient 177–214*	Advanced 215 and above*
1.5	2.3	2.1	---

* NAEP civics scale range.

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B1.4 Grade 4: *Relationship of the U.S. to other nations and to world affairs*

Overall percentage "Correct"	Standard errors for percentage "Correct" within achievement level ranges		
	Basic 136–176*	Proficient 177–214*	Advanced 215 and above*
1.3	2.5	3.4	---

* NAEP civics scale range.

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B1.5 Grade 4: *Roles of U.S. citizens in American democracy*

Overall percentage "Correct"	Standard errors for percentage "Correct" within achievement level ranges		
	Basic 136–176*	Proficient 177–214*	Advanced 215 and above*
1.1	2.2	3.7	---

* NAEP civics scale range.

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Standard Errors for Sample Response Percentages

Table B1.6 Grade 8: *Relationship of the U.S. to other nations and to world affairs*

Overall percentage "Correct"	Standard errors for percentage "Correct" within achievement level ranges		
	Basic 134–177*	Proficient 178–212*	Advanced 213 and above*
1.1	1.7	1.8	---

* NAEP civics scale range.

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B1.7 Grade 8: *Foundations of the American political system*

Overall percentage "Correct"	Standard errors for percentage "Correct" within achievement level ranges		
	Basic 134–177*	Proficient 178–212*	Advanced 213 and above*
1.3	1.9	3.4	---

* NAEP civics scale range.

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B1.8 Grade 8: *Foundations of the American political system*

Overall percentage "Complete"	Standard errors for percentage "Complete" within achievement level ranges		
	Basic 134–177*	Proficient 178–212*	Advanced 213 and above*
0.7	1.0	2.6	---

* NAEP civics scale range.

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Standard Errors for Sample Response Percentages

Table B1.9 Grade 12: *Foundations of the American political system*

	Standard errors for percentage "Correct" within achievement level ranges		
Overall percentage "Correct"	Basic 139–173*	Proficient 174–203*	Advanced 204 and above*
1.2	2.1	2.0	---

* NAEP civics scale range.

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B1.10 Grade 12: *Foundations of the American political system*

	Standard errors for percentage "Complete" within achievement level ranges		
Overall percentage "Complete"	Basic 139–173*	Proficient 174–203*	Advanced 204 and above*
1.3	1.7	3.9	6.4

* NAEP civics scale range.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B1.11 Grade 12: *Functions and purpose of government*

	Standard errors for percentage "Correct" within achievement level ranges		
Overall percentage "Correct"	Basic 139–173*	Proficient 174–203*	Advanced 204 and above*
1.3	2.2	3.7	7.1

* NAEP civics scale range.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B2.1

Standard errors for average civics scale scores by gender: 1998

	Percentage of students	Average scale score
	Grade 4	
Male	0.9	1.0
Female	0.9	0.9
	Grade 8	
Male	0.6	0.9
Female	0.6	0.8
	Grade 12	
Male	0.7	1.1
Female	0.7	0.8

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B2.2

Standard errors for average civics scale scores by race/ethnicity: 1998

	Percentage of students	Average scale score
	Grade 4	
White	0.2	0.9
Black	0.1	1.2
Hispanic	0.2	1.7
Asian/Pacific Islander	0.1	2.5
American Indian	0.2	3.7
	Grade 8	
White	0.1	0.9
Black	0.1	1.1
Hispanic	0.1	1.2
Asian/Pacific Islander	0.3	5.8
American Indian	0.3	3.5 *
	Grade 12	
White	0.4	0.9
Black	0.3	1.7
Hispanic	0.3	1.3
Asian/Pacific Islander	0.2	4.2
American Indian	0.2	6.3 *

* Estimate may be unreliable due to small sample size.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B2.3

Standard errors for average civics scale scores by parents' highest level of education: 1998

	Percentage of students	Average scale score
Grade 4		
Graduated from college	1.1	0.9
Some education after high school	0.6	1.4
Graduated from high school	0.7	1.7
Did not finish high school	0.6	3.1
I don't know.	0.5	2.0
Grade 8		
Graduated from college	0.9	0.8
Some education after high school	0.5	1.0
Graduated from high school	0.6	1.2
Did not finish high school	0.5	3.2
I don't know.	0.2	3.1
Grade 12		
Graduated from college	1.1	0.9
Some education after high school	0.7	1.1
Graduated from high school	0.5	1.2
Did not finish high school	0.3	2.1
I don't know.	0.1	5.3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B2.4

Standard errors for average civics scale scores by region: 1998

	Percentage of students	Average scale score
Grade 4		
Northeast	0.6	1.5
Southeast	0.9	0.8
Central	0.4	1.7
West	1.0	1.6
Grade 8		
Northeast	0.6	1.6
Southeast	1.0	1.4
Central	0.2	1.6
West	1.2	1.3
Grade 12		
Northeast	1.0	1.8
Southeast	1.0	1.4
Central	0.7	2.1
West	0.9	0.9

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B2.5

Standard errors for average civics scale scores by type of location: 1998

	Percentage of students	Average scale score
Grade 4		
Central city	1.3	1.2
Urban fringe/large town	1.8	1.3
Rural/small town	1.6	1.8
Grade 8		
Central city	1.4	1.2
Urban fringe/large town	1.9	1.2
Rural/small town	1.4	1.6
Grade 12		
Central city	1.6	1.4
Urban fringe/large town	1.8	1.3
Rural/small town	1.3	1.4

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B2.6

Standard errors for average civics scale scores by Free/Reduced-Price School Lunch Program eligibility: 1998

	Percentage of students	Average scale score
Grade 4		
Eligible	1.1	0.9
Not eligible	1.4	1.1
Information not available	1.5	2.2
Grade 8		
Eligible	0.9	1.1
Not eligible	1.7	1.0
Information not available	1.9	2.2
Grade 12		
Eligible	0.8	1.4
Not eligible	2.0	1.0
Information not available	2.1	1.3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B2.7

Standard errors for average civics scale scores by type of school: 1998

	Percentage of students	Average scale score
Grade 4		
Public	0.7	0.7
Nonpublic	0.7	1.9
Nonpublic: Catholic	0.6	1.7
Other nonpublic	0.5	4.4
Grade 8		
Public	1.0	0.7
Nonpublic	1.0	2.8
Nonpublic: Catholic	0.8	1.6
Other nonpublic	0.6	5.9
Grade 12		
Public	1.0	0.9
Nonpublic	1.0	1.4
Nonpublic: Catholic	0.9	1.5
Other nonpublic	0.4	3.0

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B3.1

Standard errors for percentage of students at or above achievement levels in civics by gender: 1998

	Below Basic	At or above Basic	At or above Proficient	Advanced
Grade 4				
Male	1.2	1.2	1.2	0.4
Female	1.0	1.0	1.2	0.4
Grade 8				
Male	1.1	1.1	1.0	0.3
Female	1.2	1.2	1.1	0.3
Grade 12				
Male	1.2	1.2	1.2	0.6
Female	1.2	1.2	1.1	0.4

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure B3.1

Standard errors for percentage of students within each achievement level range in civics by gender: 1998

	Below Basic	At Basic	At Proficient	At Advanced
Grade 4				
Male	1.2	1.3	1.2	0.4
Female	1.0	1.0	1.1	0.4
Grade 8				
Male	1.1	1.1	1.0	0.3
Female	1.2	1.0	1.1	0.3
Grade 12				
Male	1.2	1.0	1.0	0.6
Female	1.2	1.0	1.2	0.4

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B3.2

Standard errors for percentage of students at or above achievement levels in civics by race/ethnicity: 1998

	Below Basic	At or above Basic	At or above Proficient	Advanced
Grade 4				
White	1.1	1.1	1.3	0.5
Black	1.8	1.8	1.2	0.3
Hispanic	2.2	2.2	0.9	---
Asian/Pacific Islander	3.5	3.5	4.7	1.3
American Indian	4.0	4.0	3.9	---
Grade 8				
White	1.0	1.0	1.1	0.3
Black	1.7	1.7	1.0	---
Hispanic	2.2	2.2	0.8	0.2
Asian/Pacific Islander	5.8	5.8	4.5	1.1
American Indian	5.7	5.7	3.7	---
Grade 12				
White	1.1	1.1	1.2	0.6
Black	2.3	2.3	1.3	0.3
Hispanic	1.9	1.9	1.3	0.4
Asian/Pacific Islander	3.8	3.8	6.2	2.1
American Indian	8.8	8.8	4.3	---

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure B3.2

Standard errors for percentage of students within each achievement level range in civics by race/ethnicity: 1998

	Below Basic	At Basic	At Proficient	At Advanced
Grade 4				
White	1.1	1.0	1.2	0.5
Black	1.8	2.3	1.2	0.3
Hispanic	2.2	1.9	0.9	---
Asian/Pacific Islander	3.5	5.8	4.8	1.3
American Indian	4.0	4.6	3.9	---
Grade 8				
White	1.0	1.0	1.0	0.3
Black	1.7	1.6	1.0	---
Hispanic	2.2	2.3	0.8	0.2
Asian/Pacific Islander	5.8	4.1	4.1	1.1
American Indian	5.7	4.3	3.8	---
Grade 12				
White	1.1	0.8	1.1	0.6
Black	2.3	2.1	1.2	0.3
Hispanic	1.9	2.3	1.3	0.4
Asian/Pacific Islander	3.8	4.0	4.8	2.1
American Indian	8.8	8.2	4.1	---

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B3.3

Standard errors for percentage of students at or above achievement levels in civics by parents' highest level of education: 1998

	Below Basic	At or above Basic	At or above Proficient	Advanced
		Grade 4		
Graduated from college	1.2	1.2	1.2	0.5
Some education after high school	2.3	2.3	1.9	0.6
Graduated from high school	2.8	2.8	2.9	---
Did not finish high school	5.3	5.3	3.2	---
I don't know.	2.6	2.6	2.7	---
		Grade 8		
Graduated from college	1.0	1.0	1.2	0.4
Some education after high school	1.5	1.5	1.2	0.2
Graduated from high school	2.0	2.0	1.4	0.2
Did not finish high school	3.8	3.8	1.2	---
I don't know.	4.1	4.1	2.2	---
		Grade 12		
Graduated from college	1.0	1.0	1.3	0.8
Some education after high school	1.3	1.3	1.4	0.4
Graduated from high school	1.8	1.8	1.4	0.2
Did not finish high school	2.6	2.6	1.6	---
I don't know.	6.7	6.7	---	---

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure B3.3

Standard errors for percentage of students within each achievement level range in civics by parents' highest level of education: 1998

	Below Basic	At Basic	At Proficient	At Advanced
Grade 4				
Graduated from college	1.2	0.9	1.2	0.5
Some education after high school	2.3	2.2	2.0	0.6
Graduated from high school	2.8	3.3	2.8	---
Did not finish high school	5.3	6.4	2.2	---
I don't know.	2.6	2.8	2.8	---
Grade 8				
Graduated from college	1.0	1.1	1.2	0.4
Some education after high school	1.5	1.6	1.2	0.2
Graduated from high school	2.0	2.0	1.4	0.2
Did not finish high school	3.8	4.0	1.2	---
I don't know.	4.1	4.2	2.2	---
Grade 12				
Graduated from college	1.0	1.2	1.0	0.8
Some education after high school	1.3	1.4	1.3	0.4
Graduated from high school	1.8	2.3	1.3	0.2
Did not finish high school	2.6	2.2	1.6	---
I don't know.	6.7	6.9	---	---

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B3.4

Standard errors for percentage of students at or above achievement levels in civics by region: 1998

	Below Basic	At or above Basic	At or above Proficient	Advanced
		Grade 4		
Northeast	1.9	1.9	1.9	0.7
Southeast	1.3	1.3	1.5	0.4
Central	2.4	2.4	2.2	0.7
West	2.0	2.0	1.5	0.3
		Grade 8		
Northeast	1.9	1.9	2.1	0.4
Southeast	1.8	1.8	1.5	0.4
Central	1.7	1.7	1.3	0.6
West	1.6	1.6	1.3	0.3
		Grade 12		
Northeast	2.3	2.3	1.6	0.5
Southeast	2.1	2.1	1.1	0.6
Central	2.3	2.3	3.2	1.1
West	1.0	1.0	1.3	0.5

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure B3.4

Standard errors for percentage of students within each achievement level range in civics by region: 1998

	Below Basic	At Basic	At Proficient	At Advanced
	Grade 4			
Northeast	1.9	1.7	1.9	0.7
Southeast	1.3	1.5	1.3	0.4
Central	2.4	1.8	2.2	0.7
West	2.0	1.9	1.5	0.3
	Grade 8			
Northeast	1.9	1.6	2.2	0.4
Southeast	1.8	1.6	1.4	0.4
Central	1.7	1.4	1.4	0.6
West	1.6	1.1	1.3	0.3
	Grade 12			
Northeast	2.3	1.4	1.6	0.5
Southeast	2.1	1.6	1.1	0.6
Central	2.3	2.1	2.6	1.1
West	1.0	1.1	1.1	0.5

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B3.5

Standard errors for percentage of students at or above achievement levels in civics by type of location: 1998

	Below Basic	At or above Basic	At or above Proficient	Advanced
Grade 4				
Central city	1.2	1.2	1.5	0.4
Urban fringe/large town	2.0	2.0	1.3	0.4
Rural/small town	2.1	2.1	2.2	0.7
Grade 8				
Central city	1.6	1.6	1.3	0.3
Urban fringe/large town	1.4	1.4	1.5	0.4
Rural/small town	1.7	1.7	1.5	0.5
Grade 12				
Central city	1.6	1.6	1.6	0.7
Urban fringe/large town	1.6	1.6	1.5	0.5
Rural/small town	2.0	2.0	1.8	0.7

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure B3.5

Standard errors for percentage of students within each achievement level range in civics by type of location: 1998

	Below Basic	At Basic	At Proficient	At Advanced
Grade 4				
Central city	1.2	1.3	1.3	0.4
Urban fringe/large town	2.0	1.6	1.3	0.4
Rural/small town	2.1	1.6	2.3	0.7
Grade 8				
Central city	1.6	1.3	1.3	0.3
Urban fringe/large town	1.4	1.2	1.5	0.4
Rural/small town	1.7	1.2	1.5	0.5
Grade 12				
Central city	1.6	1.3	1.3	0.7
Urban fringe/large town	1.6	1.3	1.4	0.5
Rural/small town	2.0	1.7	1.5	0.7

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B3.6

Standard errors for percentage of students at or above achievement levels in civics by Free/Reduced-Price School Lunch Program eligibility: 1998

	Below Basic	At or above Basic	At or above Proficient	Advanced
Grade 4				
Eligible	1.3	1.3	0.9	---
Not eligible	1.4	1.4	1.3	0.5
Information not available	3.1	3.1	2.5	0.9
Grade 8				
Eligible	1.6	1.6	0.8	0.2
Not eligible	1.2	1.2	1.2	0.3
Information not available	2.7	2.7	2.1	0.6
Grade 12				
Eligible	2.1	2.1	1.7	0.4
Not eligible	1.1	1.1	1.3	0.5
Information not available	1.6	1.6	1.5	0.7

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure B3.6

Standard errors for percentage of students within each achievement level range in civics by Free/Reduced-Price School Lunch Program eligibility: 1998

	Below Basic	At Basic	At Proficient	At Advanced
Grade 4				
Eligible	1.3	1.4	1.0	---
Not eligible	1.4	1.3	1.3	0.5
Information not available	3.1	2.9	2.0	0.9
Grade 8				
Eligible	1.6	1.5	0.8	0.2
Not eligible	1.2	0.9	1.2	0.3
Information not available	2.7	2.0	2.1	0.6
Grade 12				
Eligible	2.1	1.8	1.5	0.4
Not eligible	1.1	1.0	1.1	0.5
Information not available	1.6	1.2	1.5	0.7

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B3.7

Standard errors for percentage of students at or above achievement levels in civics by type of school: 1998

	Below Basic	At or above Basic	At or above Proficient	Advanced
		Grade 4		
Public	1.0	1.0	0.9	0.4
Nonpublic	2.5	2.5	2.4	0.9
Nonpublic: Catholic	1.8	1.8	2.8	1.1
Other nonpublic	6.0	6.0	5.0	1.7
		Grade 8		
Public	1.0	1.0	0.8	0.2
Nonpublic	2.8	2.8	2.4	0.7
Nonpublic: Catholic	1.5	1.5	3.0	0.8
Other nonpublic	5.9	5.9	4.3	1.4
		Grade 12		
Public	1.0	1.0	1.0	0.4
Nonpublic	1.8	1.8	2.1	1.2
Nonpublic: Catholic	2.0	2.0	2.4	1.3
Other nonpublic	3.9	3.9	3.8	2.7

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Figure B3.7

Standard errors for percentage of students within each achievement level range in civics by type of school: 1998

	Below Basic	At Basic	At Proficient	At Advanced
Grade 4				
Public	1.0	0.9	1.0	0.4
Nonpublic	2.5	2.5	2.2	0.9
Nonpublic: Catholic	1.8	2.7	2.5	1.1
Other nonpublic	6.0	5.0	4.5	1.7
Grade 8				
Public	1.0	0.7	0.9	0.2
Nonpublic	2.8	2.8	2.4	0.7
Nonpublic: Catholic	1.5	2.4	2.9	0.8
Other nonpublic	5.9	5.2	4.0	1.4
Grade 12				
Public	1.0	0.8	0.9	0.4
Nonpublic	1.8	1.8	1.7	1.2
Nonpublic: Catholic	2.0	1.7	2.1	1.3
Other nonpublic	3.9	3.6	2.9	2.7

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B4.1

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by teacher's highest degree, grades 4 and 8: 1998

What is the highest academic degree you hold?	**Grade 4**	**Grade 8**
High School, Associate's Degree, or Vocational Certification		
Percentage of students	0.2	0.2
Average scale score	---	---
Percentage at or above Proficient	---	---
Bachelor's Degree		
Percentage of students	2.3	1.9
Average scale score	1.1	0.9
Percentage at or above Proficient	1.5	1.1
Master's Degree		
Percentage of students	2.0	1.9
Average scale score	1.0	1.2
Percentage at or above Proficient	1.3	1.4
Education Specialist Degree		
Percentage of students	0.8	0.8
Average scale score	5.1	2.9
Percentage at or above Proficient	6.8	3.2
Doctorate or Professional Degree		
Percentage of students	0.4	0.4
Average scale score	---	6.4
Percentage at or above Proficient	---	6.9

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

BEST COPY AVAILABLE

Table B4.2

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by teacher's undergraduate major, grades 4 and 8: 1998

What was your undergraduate major?	Grade 4	Grade 8
History		
Percentage of students	0.7	1.7
Average scale score	4.7	1.0
Percentage at or above Proficient	4.3	1.2
Political Science		
Percentage of students	0.4	1.2
Average scale score	---	2.8
Percentage at or above Proficient	---	4.2
Education		
Percentage of students	1.3	2.2
Average scale score	0.8	1.5
Percentage at or above Proficient	1.2	1.9
Other		
Percentage of students	1.1	1.5
Average scale score	2.2	1.5
Percentage at or above Proficient	2.2	1.6

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

BEST COPY AVAILABLE

Table B4.3

Standard errors for percentages of students, average civics scale scores, and percentage at or above *Proficient* by teacher's type of certification, grades 4 and 8: 1998

Type of teaching certification held in main assignment field	Percentage of students	Average scale score	Percentage at or above *Proficient*
	Grade 4		
Advanced Professional	1.4	2.1	3.0
Regular	1.6	0.8	1.1
Probationary	0.5	4.0	4.9
Temp/Provisional	0.7	4.0	3.0
Other	0.2	---	---
Don't have	0.4	7.0	6.1
	Grade 8		
Advanced Professional	1.9	2.2	2.8
Regular	2.1	0.9	1.0
Probationary	0.5	3.3	3.2
Temp/Provisional	0.6	3.9	4.4
Other	0.2	5.2	7.4
Don't have	0.6	10.7	6.2

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B4.4

Standard errors for percentages of students, average civics scale scores, and percentage at or above *Proficient* by years of general teaching experience, grades 4 and 8: 1998

Years of elementary or secondary teaching experience	**Percentage of students**	**Average scale score**	**Percentage at or above *Proficient***
		Grade 4	
2 years or less	1.1	2.3	2.9
3-5 years	1.0	2.1	2.8
6-10 years	1.0	1.5	2.0
11-24 years	1.5	1.2	1.3
25 years or more	1.6	1.3	2.2
		Grade 8	
2 years or less	1.0	2.4	2.3
3-5 years	1.5	2.1	2.2
6-10 years	1.4	1.8	2.1
11-24 years	1.8	1.3	1.7
25 years or more	1.8	1.8	1.7

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B4.5

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by years teaching government/civics, grades 4 and 8: 1998

Years of teaching government or civics	Percentage of students	Average scale score	Percentage at or above *Proficient*
	Grade 4		
None	---	---	---
2 years or less	2.5	1.6	1.9
3-5 years	1.4	2.4	3.0
6-10 years	1.2	2.3	3.2
11-24 years	2.0	1.8	2.4
25 or more years	0.9	2.4	3.1
	Grade 8		
None	2.6	1.6	2.0
2 years or less	2.1	2.0	2.0
3-5 years	1.7	2.9	3.8
6-10 years	2.4	3.0	2.9
11-24 years	1.7	2.5	2.6
25 or more years	1.2	3.2	3.3

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B4.6

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by amount of time teachers reported spending in professional development workshops in social studies during the last twelve months, grades 4 and 8: 1998

Time spent in professional development workshops in social studies in the past twelve months	**Percentage of students**	**Average scale score**	**Percentage at or above *Proficient***
	Grade 4		
None	2.0	1.3	1.7
Less than 6 hours	2.1	1.5	1.8
6-15 hours	1.1	2.3	3.2
16-35 hours	0.8	3.5	3.6
More than 35 hours	0.5	4.4	5.1
	Grade 8		
None	2.1	1.6	1.5
Less than 6 hours	1.8	1.6	1.5
6-15 hours	2.1	1.5	1.5
16-35 hours	1.4	1.8	2.6
More than 35 hours	1.5	2.5	3.8

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B4.7

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by teacher's reported preparation, grades 4 and 8: 1998

How well prepared are you in the following?	Grade 4			Grade 8		
	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient
Social studies instruction						
Well prepared	2.0	1.1	1.4	1.7	0.9	1.1
Moderately well prepared	1.8	1.1	1.4	1.6	1.4	1.9
Not well prepared	0.7	3.8	3.4	0.5	5.9	4.7
Using instructional materials in social studies						
Well prepared	1.8	1.2	1.5	2.6	1.0	1.3
Moderately well prepared	1.6	1.2	1.5	2.5	1.0	1.2
Not well prepared	1.0	2.8	2.3	0.8	4.1	4.2
Classroom climate and governance						
Well prepared	1.6	1.1	1.3	1.9	0.8	1.2
Moderately well prepared	1.5	1.3	1.8	1.7	1.5	1.6
Not well prepared	0.6	2.3	3.0	0.6	3.6	4.2
Using voluntary national standards for civics						
Well prepared	0.8	3.4	4.5	1.3	2.3	2.2
Moderately well prepared	1.4	1.7	2.1	2.5	1.3	1.4
Not well prepared	1.5	0.9	1.2	2.5	1.2	1.3
Using software for social studies						
Well prepared	1.0	3.7	4.2	1.4	2.3	2.7
Moderately well prepared	1.5	1.4	2.1	2.1	1.0	1.1
Not well prepared	1.7	0.9	1.2	2.2	1.4	1.6

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B4.8

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by teacher's reported preparedness to fulfill certain teaching-related tasks, grades 4 and 8: 1998

	Grade 4			Grade 8		
How well prepared are you in the following:	**Percentage of students**	**Average scale score**	**Percentage at or above Proficient**	**Percentage of students**	**Average scale score**	**Percentage at or above Proficient**
Use of telecommunications						
Well prepared	1.3	2.0	2.7	1.7	1.8	1.6
Moderately well prepared	1.8	1.0	1.7	2.2	0.9	1.3
Not well prepared	2.1	1.2	1.6	2.0	1.8	1.9
Use of computers						
Well prepared	1.8	1.6	2.7	1.9	1.6	1.5
Moderately well prepared	1.5	0.8	1.0	2.1	1.0	1.2
Not well prepared	1.4	2.0	2.4	1.3	2.6	2.7
Cooperative group instruction						
Well prepared	1.5	1.0	1.5	2.2	1.1	1.3
Moderately well prepared	1.5	1.2	1.4	2.0	1.3	1.4
Not well prepared	0.5	5.4	5.4	0.9	4.0	3.3
Classroom management and organization						
Well prepared	1.3	0.8	1.2	1.5	0.8	1.1
Moderately well prepared	1.3	2.0	2.2	1.4	2.0	2.2
Not well prepared	0.2	---	---	0.3	6.3	7.3

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B4.9

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by class time per day spent on social studies instruction, grades 4 and 8: 1998

How much time do you spend with this class for social studies instruction on a typical day?	Grade 4	Grade 8
Less than 30 minutes		
Percentage of students	1.0	0.9
Average scale score	2.0	8.9
Percentage at or above Proficient	2.3	6.6
30-44 minutes		
Percentage of students	1.8	2.5
Average scale score	1.0	1.2
Percentage at or above Proficient	1.3	1.5
45-60 minutes		
Percentage of students	1.9	2.5
Average scale score	2.0	1.2
Percentage at or above Proficient	2.2	1.3
Greater than 60 minutes		
Percentage of students	0.3	0.9
Average scale score	---	2.2
Percentage at or above Proficient	---	2.3

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B4.10

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by teachers' reports on the availability of resources, grades 4 and 8: 1998

Which is true about how well your school system provides you with the instructional materials and other resources you need to teach your class?	Grade 4	Grade 8
All		
Percentage of students	1.5	1.6
Average scale score	1.7	2.0
Percentage at or above Proficient	2.2	2.3
Most		
Percentage of students	1.6	1.6
Average scale score	1.1	1.1
Percentage at or above Proficient	1.4	1.2
Some		
Percentage of students	1.5	2.1
Average scale score	1.2	1.3
Percentage at or above Proficient	1.4	1.3
None		
Percentage of students	0.2	0.2
Average scale score	---	---

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B4.11

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by availability of computers, grades 4, 8, and 12: 1998

Are computers available to students in your classes in any of the following ways?	YES			NO		
	Percentage of students	**Average scale score**	**Percentage at or above Proficient**	**Percentage of students**	**Average scale score**	**Percentage at or above Proficient**
Grade 4						
Available in all classrooms	1.8	0.9	1.1	1.8	1.9	2.2
Grouped in a separate computer lab available to classes	2.2	0.9	1.0	2.2	2.4	2.3
Available to bring to classrooms when needed	2.8	1.5	1.7	2.8	1.2	1.4
Grade 8						
Available in all classrooms	3.0	1.2	1.3	3.0	1.5	1.4
Grouped in a separate computer lab available to classes	1.7	0.8	0.9	1.7	3.0	1.9
Available to bring to classrooms when needed	2.2	1.3	1.3	2.2	1.0	1.0
Grade 12						
Available in all classrooms	2.2	1.9	2.5	2.2	1.0	1.2
Grouped in a separate computer lab available to classes	1.3	0.9	1.1	1.3	3.7	3.9
Available to bring to classrooms when needed	3.1	1.5	1.9	3.1	1.2	1.3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

BEST COPY AVAILABLE

Table B4.12

THE NATION'S REPORT CARD naep

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by use of computers and the Internet for social studies instruction, as reported by teachers, grades 4 and 8: 1998

	Grade 4			Grade 8		
	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient
Availability of computers in social studies class						
Not available	1.3	2.3	2.6	2.3	3.1	2.3
Lab/library but difficult to access	1.3	1.6	2.0	2.3	1.3	1.6
Readily accessed in lab/library	1.5	2.5	3.3	2.3	1.6	1.8
Available in the classroom	2.3	1.2	1.3	1.5	2.1	2.3
Use computer software						
Every day	0.5	---	---	0.4	6.3	7.3
Once or twice a week	0.8	2.7	3.6	1.1	2.5	3.3
Once or twice a month	1.4	1.7	2.1	1.9	1.3	1.3
Never or hardly ever	1.5	0.9	1.2	2.3	1.3	1.4
Access to information through Internet in the classroom						
Every day	0.3	---	---	0.3	---	---
Once or twice a week	0.9	5.0	5.5	1.2	2.3	2.6
Once or twice a month	1.7	2.2	2.6	2.7	1.4	1.5
Never or hardly ever	2.0	0.8	1.2	2.5	1.3	1.4

--- Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B5.1

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by type of content studied this year as reported by students, grade 4: 1998

During this school year, have you studied any of the following topics?	Yes			No			I Don't know		
	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient
How our government works	1.2	0.9	1.4	1.0	1.2	2.3	0.7	1.0	1.1
Rules/laws of government	1.2	0.8	1.1	1.1	1.3	2.2	0.6	1.5	1.9
Elections and voting	1.2	0.8	1.5	1.3	1.3	2.1	0.6	1.6	1.6
The President/ leaders of country	1.1	0.9	1.2	1.0	1.4	2.1	0.7	1.3	1.7
Your community	0.8	0.7	1.0	0.6	1.7	2.7	0.7	1.4	1.6
Rights and responsibilities of citizens	1.2	0.9	1.3	1.0	1.3	2.1	0.7	1.2	1.4
How people solve disagreements	1.1	0.9	1.3	0.8	1.2	2.4	0.8	1.4	1.9

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B5.2

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by type of content studied this year as reported by students, grades 8 and 12: 1998

	GRADE 8						GRADE 12					
	Yes			No			Yes			No		
This year studied	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient
U.S. Constitution	1.5	0.7	0.9	1.2	2.1	2.3	1.6	0.9	1.2	1.5	1.3	1.6
Congress	1.5	0.7	1.0	1.2	1.9	1.9	1.5	0.9	1.1	1.4	1.3	1.7
President and cabinet	1.5	0.8	1.1	1.3	1.1	1.1	1.5	0.9	1.2	1.4	1.1	1.5
How laws are made	1.4	0.8	1.0	1.3	1.2	1.4	1.5	1.0	1.1	1.4	1.1	1.4
The court systems	1.6	0.8	1.1	1.4	1.2	1.4	1.4	0.9	1.3	1.3	1.1	1.3
State and local government	1.4	0.7	0.9	1.1	1.5	1.6	1.4	0.8	1.2	1.4	1.3	1.6
Political parties, elections, voting	1.3	0.8	1.0	1.1	1.4	1.7	1.4	0.8	1.1	1.4	1.1	1.5
Other countries' government	0.9	0.9	1.0	0.9	0.9	1.2	1.0	1.0	1.2	1.1	0.9	1.4
International organizations	0.8	1.0	0.9	0.9	0.9	1.4	1.1	0.9	1.1	1.2	1.0	1.4

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B5.3

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by frequency of selected instructional activities as reported by teachers, grade 4: 1998

	Frequency of instructional activity											
	Every day			Once or twice a week			Once or twice a month			Never or hardly ever		
In grade 4, how often do you . . .	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient
Use a social studies textbook?	1.8	0.8	1.5	1.7	1.6	2.0	1.0	4.2	4.3	1.0	3.2	3.6
Use books, newspapers, magazines?	0.8	2.7	2.9	1.7	1.0	1.5	1.5	1.0	1.2	0.9	3.3	3.7
Use primary documents?	0.3	5.2	5.8	0.8	2.6	3.3	1.8	1.7	1.7	1.6	1.0	1.5
Use quantitative data, charts, or graphs?	1.8	1.9	2.3	1.6	1.0	1.4	1.6	1.7	1.9	0.3	5.0	4.8
Use computer software?	0.5	---	---	0.8	2.7	3.6	1.4	1.7	2.1	1.5	0.9	1.2
Use films, videos, filmstrips?	0.1	---	---	1.1	1.8	2.4	1.7	1.0	1.4	1.5	1.6	1.6
Have students complete a worksheet?	0.8	2.7	2.7	1.7	0.9	1.5	1.3	1.9	2.4	0.9	3.4	3.3
Give a lecture?	1.4	1.8	2.1	1.6	1.1	1.5	1.1	2.0	2.4	1.5	2.0	2.7
Have students do a group activity/project?	0.7	3.7	4.2	1.7	1.8	2.1	1.8	1.0	1.3	0.9	2.2	3.0
Have students write a three or more page report?	---	---	---	0.4	7.0	5.1	1.2	1.2	1.6	1.1	1.0	1.3
Have students participate in debates?	0.3	---	---	0.5	2.8	5.4	1.7	1.9	2.1	1.7	1.0	1.4
Have students participate in mock trials?	---	---	---	0.6	8.2	8.2	1.7	1.8	2.1	1.8	0.9	1.2
Have students write letters?	---	---	---	0.5	5.3	4.6	1.5	1.2	1.7	1.6	1.1	1.3

---Standard error estimate cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B5.4

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by frequency of selected instructional activities as reported by teachers, grade 8: 1998

	Frequency of instructional activity											
	Every day			Once or twice a week			Once or twice a month			Never or hardly ever		
In grade 8, how often do you. . .	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient	Percentage of students	Average scale score	Percentage at or above Proficient
Use a social studies textbook?	2.2	0.9	1.2	2.3	1.6	1.8	0.6	4.7	4.6	0.6	8.8	6.0
Use books, newspapers, magazines?	0.8	2.0	2.7	2.3	1.2	1.4	2.3	1.3	1.6	1.1	4.2	3.0
Use primary documents?	0.7	5.9	9.8	1.5	1.6	2.3	2.2	1.1	1.1	1.8	2.2	2.0
Use quantitative data, charts, or graphs?	1.9	1.5	2.0	2.2	1.2	1.4	1.9	1.6	2.0	0.5	12.0	7.4
Use computer software?	0.4	6.3	7.3	1.1	2.5	3.3	1.9	1.3	1.3	2.3	1.3	1.4
Use films, videos, filmstrips?	0.4	10.5	6.9	2.2	1.7	2.2	2.2	1.0	1.3	1.6	3.3	2.5
Have students complete a worksheet?	1.5	3.5	4.0	2.0	1.2	1.3	1.7	1.8	2.1	0.8	5.0	4.4
Give a lecture?	2.0	1.1	1.5	2.2	1.1	1.5	1.3	2.4	1.9	1.0	4.0	3.8
Have students do a group activity/project?	1.0	4.3	6.1	2.3	1.2	1.5	2.2	1.2	1.3	0.7	3.0	3.5
Have students write a three or more page report?	---	---	---	0.5	5.2	5.5	2.2	1.1	1.3	2.2	1.4	1.5
Have students participate in debates?	0.5	6.4	4.9	1.3	2.3	2.8	2.4	1.3	1.7	2.2	1.5	1.4
Have students participate in mock trials?	0.2	---	---	1.1	4.0	5.5	2.6	1.4	1.7	2.5	1.2	1.1
Have students write letters?	0.2	---	---	0.5	3.7	3.4	1.9	1.5	1.6	2.1	1.1	1.1

---Standard error cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B5.5

Summary of standard errors of paired percentages of students and paired scale score means with significant differences between less experienced (two years or less) and experienced (three years or more) teachers by selected types of instructional activities, grade 4: 1998

How often do you use the following resources to teach social studies in this class?	Frequency of instructional activity: Every day		Once or twice a week		Once or twice a month		Never or hardly ever	
	Percentage of students	Average scale score	Percentage of students	Average scale score	Percentage of students	Average scale score	Percentage of students	Average scale score
Social studies textbook		✓ 2.7–0.9		✓ 4.2–1.6		✓ 5.9–4.4		
Books, newspapers, magazines				✓ 2.3–1.5		✓ 2.7–1.2		✓ 5.6–4.9
Primary documents				✓ 4.9–2.7		✓ 3.2–1.7		✓ 3.3–1.1
Quantitative data, charts, or graphs		✓ 3.7–2.1	✓ 4.2–1.8	✓ 3.1–1.1		✓ 3.0–2.4		
Computer software					✓ 3.1–1.5			✓ 1.8–1.3
Films, videos, filmstrips			✓ 1.9–1.6			✓ 2.5–1.1		
Have students complete a worksheet				✓ 2.9–1.0		✓ 3.8–2.0		✓ 6.6–3.5
Give a lecture		✓ 4.1–2.1		✓ 3.3–1.2			✓ 1.9–1.7	
Have students do a group activity/project				✓ 3.6–1.7		✓ 2.8–1.1		✓ 6.4–2.3
Have students write a three or more page report								✓ 2.1–1.2
Have students participate in debates						✓ 2.8–2.1	✓ 4.4–2.0	✓ 3.1–0.9
Have students participate in mock trials						✓ 3.3–1.9		✓ 1.9–1.1
Have students write letters						✓ 2.5–1.6		✓ 2.1–1.4

✓ Indicates a significant difference in favor of experienced teachers.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B5.6

Summary of standard errors for examples of pairs of percentages of students with significant differences between social studies teachers who participated in social studies workshops in the past year and those who did not, by type of instructional activity, grades 4 and 8: 1998

How often do you use the following resources to teach social studies in this class?	Grade 4		Grade 8	
	Used more	**Used less**	**Used more**	**Used less**
Social studies textbook				✓ 4.2–2.8
Books, newspapers, magazines	✓ 0.7–1.4		✓ 4.4–2.7	
Primary documents	✓ 2.0–2.6		✓ 0.4–1.0	
Quantitative data, charts, or graphs				
Computer software	✓ 1.5–2.2		✓ 3.8–2.3	
Films, videos, filmstrips				
Have students complete a worksheet		✓ 1.1–1.4		
Give a lecture				
Have students do a group activity/project		✓ 2.1–1.3		
Have students write a three or more page report			✓ 4.1–2.6	
Have students participate in debates	✓ 2.1–2.4		✓ 3.7–2.6	
Have students participate in mock trials	✓ 2.5–2.2		✓ 4.4–2.9	
Have students write letters	✓ 2.0–1.9		✓ 2.5–2.5	

✓ Indicates a significant difference in the percentage of students experiencing the instructional activity.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B5.7

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by frequency of discussion of school studies at home, grades 4, 8, and 12: 1998

How often do you discuss things you have learned at school with someone at home?	**Percentage of students**	**Average scale score**	**Percentage at or above Proficient**
		Grade 4	
Daily	1.0	0.9	1.3
Once or twice a week	0.7	1.3	1.9
Once or twice a month	0.4	2.1	2.9
Never or hardly ever	0.6	1.3	1.5
		Grade 8	
Daily	0.7	0.8	1.1
Once or twice a week	0.6	1.3	1.5
Once or twice a month	0.4	1.7	2.2
Never or hardly ever	0.6	1.0	1.1
		Grade 12	
Daily	0.6	0.9	1.3
Once or twice a week	0.6	1.0	1.8
Once or twice a month	0.4	1.5	1.9
Never or hardly ever	0.5	1.0	1.2

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B5.8

THE NATION'S REPORT CARD naep

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by volunteer work status, grade 12: 1998

	Grade 12		
Did you do volunteer work in your community this year?	**Percentage of students**	**Average scale score**	**Percentage at or above Proficient**
Yes, with my school	0.8	1.0	1.4
Yes, on my own	0.8	1.0	1.7
No	0.9	0.9	0.9

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

Table B5.9

THE NATION'S REPORT CARD naep

Standard errors for percentage of students, average civics scale scores, and percentage at or above *Proficient* by hours per week working at a job for pay, grade 12: 1998

	Grade 12		
How many hours do you work at a job for pay?	**Percentage of students**	**Average scale score**	**Percentage at or above Proficient**
None	0.9	0.9	1.2
1-5 hours	0.3	2.4	3.1
6-10 hours	0.4	1.7	2.8
11-15 hours	0.4	1.5	2.7
16-20 hours	0.5	1.3	1.7
21 or more hours	0.6	1.1	1.2

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Civics Assessment.

APPENDIX C

Members of the NAEP Civics Development Committee

Sandy Baker
Elliott School
Munster, IN

Richard Brody
Stanford University
Stanford, CA

Elaine Craig
Center for Civic Education
Calabasas, CA

Rosie Heffernan
Our Lady of Lourdes Academy
Miami, FL

Milton Kato
Tulare County Office of Education
Educational Resource Services
Visalia, CA

Linda Levstik
University of Kentucky
Lexington, KY

Peter Litchka
Battle Creek Central Schools
Battle Creek, MI

Lori Morton
Westlawn Elementary
Laurel, MD

Richard Niemi
University of Rochester
Rochester, NY

John Patrick
Indiana University
Bloomington, IN

Sharon Shiraiwa
East Hartford-Glastonbury
Magnet School
East Hartford, CT

Judith Torney-Purta
University of Maryland
College Park, MD

Donald Vetter
Council of Chief State
School Officers
Washington, DC

BEST COPY AVAILABLE

Members of the NAEP Civics Standing Committee

John Eyster
Parker High School
Janeville, WI

David Harris
Oakland Schools
Waterford, MI

Milton Kato
Jefferson School
Madera, CA

Sheilah Mann
American Political Science Association
Washington, DC

James Marran
New Trier Township High School
Winnetka, IL

Mabel McKinney-Browning
American Bar Association
Chicago, IL

Richard Niemi
University of Rochester
Rochester, NY

John Patrick
Indiana University
Bloomington, IN

ACKNOWLEDGMENTS

This report is a product of the many individuals who contributed their considerable knowledge, experience, and creativity to the NAEP 1998 civics assessment. The NAEP civics assessment was a collaborative effort among staff from the National Center for Education Statistics (NCES) in the U.S. Department of Education, the National Assessment Governing Board (NAGB), Educational Testing Service (ETS), Westat, and National Computer Systems (NCS).

In addition, the program benefited from the contributions of hundreds of individuals at the state and local levels — governors, chief state school officers, state and district test directors, state coordinators, and district administrators — who tirelessly provided their wisdom, experience, and hard work. Most importantly, NAEP is grateful to the thousands of students and hundreds of teachers and administrators who made the assessment possible.

The NAEP 1998 civics assessment was funded through NCES, in the Office of Educational Research and Improvement of the U.S. Department of Education. The Acting Commissioner of Education Statistics, Gary W. Phillips, and the NCES staff — Peggy Carr, Arnold Goldstein, Steve Gorman, Andrew Kolstad, Marilyn McMillen, Suzanne Triplett, Barbara Marenus, Patricia Dabbs, Carol Johnson, and Sheida White — worked closely and collegially with the authors to produce this report. The authors were also provided invaluable advice and guidance by the members of the NAGB staff.

The NAEP project at ETS is directed by Stephen Lazer and John Mazzeo. Sampling and data collection activities were conducted by Westat under the direction of Rene Slobasky, Nancy Caldwell, Keith Rust, and Dianne Walsh. Printing, distribution, scoring, and processing activities were conducted by NCS under the direction of Brad Thayer, Patrick Bourgeacq, Charles Brungardt, Mathilde Kennel, Linda Reynolds, and Connie Smith.

The complex statistical and psychometric activities necessary to report results for the NAEP 1998 civics assessment were directed by Nancy Allen, John Barone, James Carlson, and Frank Jenkins. The analyses presented in this report were led by Spence Swinton with assistance from Ed Kulick, Venus Leung, and Laura Jerry.

The design and production of the report were overseen by Rod Rudder. Kelly Gibson designed the cover. Carol Errickson led the considerable production efforts with assistance from Barbette Tardugno, Kelly Gibson, Katonya Davis, and Sharon Davis-Johnson. Data checking was done by Wendy Grigg, Alice Kass, Katonya Davis, and Barbette Tardugno. Editorial assistance was provided by Karen Latham and Shari Santapau.

Production of the World Wide Web version of this report was coordinated by Pat O'Reilly, and revisions to the civics page of the NAEP website were produced by Madeline Goodman, Richard Bohlander, Jeffrey Jenkins and Andrew Baird.

Many thanks are due to the numerous reviewers, both internal and external to NCES and ETS, who reviewed this publication.

United States
Department of Education
Washington, DC 20208-5653

Official Business
Penalty for Private Use, $300

Postage and Fees Paid
U.S. Department of Education
Permit No. G-17

Standard Mail (B)

BEST COPY AVAILABLE